


LIBRARY
OF THE
UNIVERSITY
OF ILLINOIS

352.07761

M66

1889



Digitized by the Internet Archive
in 2015

ANNUAL REPORTS

OF THE

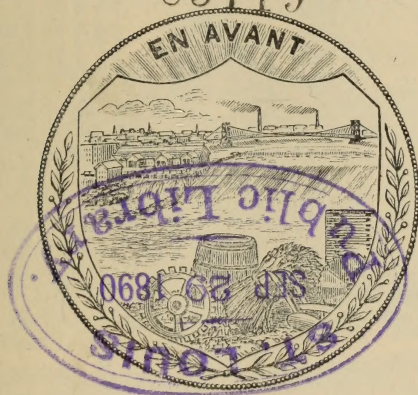
VARIOUS CITY OFFICERS

OF THE

City of Minneapolis

85119

No longer the property of
the St. Louis Public Library



FOR THE YEAR 1889.

MINNEAPOLIS :
HARRISON & SMITH, PRINTERS.
1890.

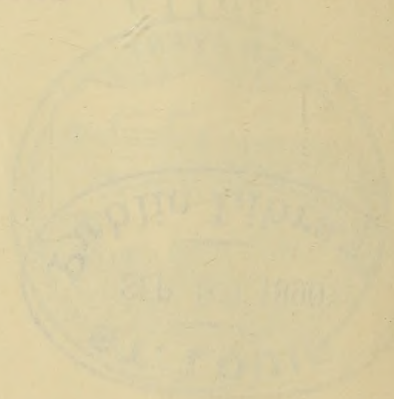
ANNUAL REPORTS

VARIOUS CITY OFFICERS

PUBLIC LIBRARY

ST. LOUIS

CITY OF MINNEAPOLIS



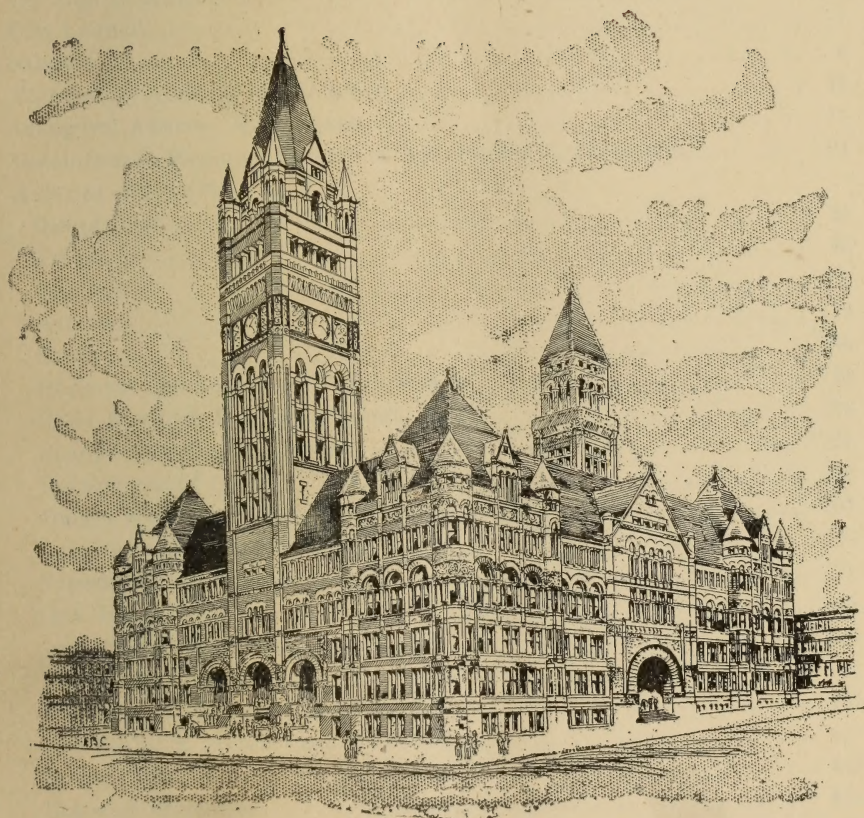
FOR THE YEAR 1895

52.07761

66

39 .

Ref. 76



New City Hall and Court House.

INDEX.

	PAGE.
Historical.....	3
Summary City Officers, 1881 to 1890.....	4
City Officers.....	5
Election of Aldermen.....	6
City Council.....	7
Salaries.....	9
Valedictory Address, Mayor Ames.....	11
Inaugural Address, Mayor Babb.....	17
Resolution in Memory of Death of Ald. Daniel G. Thompson.....	24
ANNUAL REPORTS—	
Comptroller.....	25
Treasurer.....	95
Engineer.....	107
Attorney.....	179
Clerk.....	189
Registrar and Supervisor Water Works.....	195
Chief Engineer Fire Department.....	283
Board Police Commissioners.....	327
Department of Health.....	355
Judges Municipal Court.....	391
Superintendent of Workhouse.....	395
Superintendent of Poor.....	411
City Hospital.....	415
Inspector of Buildings.....	425
Inspector of Lights.....	431
Inspector of Meats.....	435
City Sealer of Weights and Measures.....	439
Library Board.....	443
Board of Education.....	455
Board of Park Commissioners.....	459
Board of Court House and City Hall Commissioners.....	463
Assessor.....	467



Public Library Building.

HISTORICAL.

In 1838, Franklin Steele erected his claim shanty on the eastern shore of the Mississippi river, opposite the falls of St. Anthony. Seven years later, or in 1845, the first permanent house was erected in St. Anthony by Pierre Bottineau. The same year the city of St. Anthony was incorporated, and Hon. H. T. Welles (still living), elected the first mayor.

In 1849 the western shore of the Mississippi at the falls was a military reservation, and hence settlement was not permitted. But at the session of congress of that year two ex-soldiers of the Mexican war—Hon. Robert Smith, of Illinois, and Col. John H. Stevens—were, by special act, allowed to make settlement on the reserve, and the former located his claim so as to take in the falls, while the latter built his house on the hillside where the union depot now stands, and near the spot where the western end of the suspension bridge was to terminate four or five years afterwards.

In 1854 the act was passed and became a law, throwing open to settlement the reservation west of the Mississippi river, and the "squatters" were allowed to purchase the lands upon which they had settled at the uniform government price of \$1.25 per acre. At the election that year seventy-five votes were cast, and the population was estimated at two hundred. In the fall of the same year the town was christened, the name "Minneapolis" having been suggested by Mr. Charles Hoag, a gentleman who lived to a ripe old age in the vicinity of this city, dying in March, 1888.

In 1854 the city of Minneapolis (west division) was platted, and before the close of that year boasted of a permanent population of 1,000 people. In 1857 the population had increased to about 2,000, and there was a tremendous rivalry between the two hamlets, (St. Anthony and Minneapolis.) In 1858 Minneapolis was vested with its first town or village government, but did not assume the responsibility of a full-grown municipality until 1867.

Minneapolis and St. Anthony were rivals for commercial and manufacturing supremacy for more than twenty years, but finally in 1873 joined their fortunes under one name and one municipal government, and have since been known to the world as the progressive city of Minneapolis, with an area of 53 square miles, or 33,920 acres, with 1,425 acres of parks, with seven miles of paved alleys, with 21 miles of cedar block street paving, with 142 miles of water mains, with five miles of granite block paving, with 67 miles of curbing, with 57 miles of sewer, with 50 public school buildings and an enrollment of 22,000 school children, with population of 230,000, with 34,129 voters in 1888, with an assessed valuation of \$128,000,000, and a banking capital of \$8,720,000.

SUMMARY CITY OFFICERS, 1881 TO 1890:

OFFICERS.	Elected April 3, 1881 — roman. Hold overs in <i>italic.</i>	Elected April 4, 1882 — roman. Hold overs in <i>italic.</i>	Elected April 3, 1883 — roman. Hold overs in <i>italic.</i>	Elected April 1, 1884 — roman. Hold overs in <i>italic.</i>	Elected April 7, 1885 — roman. Hold overs in <i>italic.</i>	Elected April 6, 1886 — roman. Hold overs in <i>italic.</i>	Elected April 5, 1887 — roman. Hold overs in <i>italic.</i>
Mayor	<i>A. C. Rand.</i>	A. A. Ames	A. A. Ames	G. A. Pillsbury	Geo. A. Pillsbury	A. A. Ames	A. A. Ames
Comptroller	<i>Wm. B. Hill.</i>	Wm. B. Hill	T. J. Buxton	Sam. Goodnow	Sam. Goodnow	F. G. Holbrook	F. G. Holbrook
City Treasurer	<i>T. J. Buxton.</i>	T. J. Buxton	Selah Mathews	<i>Selah Mathews.</i>	Selah Mathews	Selah Mathews	Selah Mathews
City Clerk.	R. C. Benton	C. H. Benton	Selah Mathews	Selah Mathews	Selah Mathews	Selah Mathews	Selah Mathews
City Engineer	Andrew Rinker	Andrew Rinker	Andrew Rinker	Andrew Rinker	Andrew Rinker	Andrew Rinker	Andrew Rinker
Ald. 1st ward.	<i>M. W. Glenn.</i>	B. F. Nelson	B. F. Nelson	E. F. Constock	E. F. Constock	J. L. Muldoon	J. L. Muldoon
	<i>Anton Grethen.</i>	M. W. Glenn	M. W. Glenn	E. F. Constock	E. F. Constock	J. L. Muldoon	J. L. Muldoon
Ald. 2d ward	<i>B. F. Nelson.</i>	B. F. Nelson	B. F. Nelson	E. F. Constock	E. F. Constock	J. L. Muldoon	J. L. Muldoon
	<i>W. M. Barrows.</i>	W. M. Barrows	W. M. Barrows	E. F. Constock	E. F. Constock	J. L. Muldoon	J. L. Muldoon
Ald. 3d ward	<i>T. F. Anderson.</i>	T. F. Anderson	T. F. Anderson	E. F. Constock	E. F. Constock	J. L. Muldoon	J. L. Muldoon
	<i>Mathias Kees.</i>	Mathias Kees	Mathias Kees	E. F. Constock	E. F. Constock	J. L. Muldoon	J. L. Muldoon
Ald. 4th ward	<i>Daniel Walt.</i>	Daniel Walt	Daniel Walt	E. F. Constock	E. F. Constock	J. L. Muldoon	J. L. Muldoon
	<i>Frank Beebe.</i>	Frank Beebe	Frank Beebe	E. F. Constock	E. F. Constock	J. L. Muldoon	J. L. Muldoon
	<i>F. S. Gilson.</i>	F. S. Gilson	F. S. Gilson	E. F. Constock	E. F. Constock	J. L. Muldoon	J. L. Muldoon
Ald. 5th ward	<i>G. S. Cleveland.</i>	Henry C. Morse	Henry C. Morse	Henry C. Morse	Henry C. Morse	B. Cloutier	B. Cloutier
	<i>Fred L. Smith.</i>	Fred L. Smith	Fred L. Smith	Henry C. Morse	Henry C. Morse	B. Cloutier	B. Cloutier
Ald. 6th ward	<i>C. W. Clark.</i>	C. W. Clark	C. W. Clark	C. W. Clark	C. W. Clark	C. W. Clark	C. W. Clark
	<i>Joseph Holscher.</i>	Joseph Holscher	Joseph Holscher	C. W. Clark	C. W. Clark	C. W. Clark	C. W. Clark
Ald. 7th ward	<i>A. C. Haugan.</i>	A. C. Haugan	A. C. Haugan	A. C. Haugan	A. C. Haugan	A. C. Haugan	A. C. Haugan
	<i>John Holscher.</i>	John Holscher	John Holscher	A. C. Haugan	A. C. Haugan	A. C. Haugan	A. C. Haugan
Ald. 8th ward	<i>S. P. Channel.</i>	S. P. Channel	S. P. Channel	S. P. Channel	S. P. Channel	S. P. Channel	S. P. Channel
	<i>A. Lawrence.</i>	A. Lawrence	A. Lawrence	S. P. Channel	S. P. Channel	S. P. Channel	S. P. Channel
Ald. 9th ward	<i>A. Lawrence.</i>	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence
	<i>A. Lawrence.</i>	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence
Ald. 10th ward.	<i>A. Lawrence.</i>	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence
	<i>A. Lawrence.</i>	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence
Ald. 11th ward.	<i>A. Lawrence.</i>	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence
	<i>A. Lawrence.</i>	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence
Ald. 12th ward.	<i>A. Lawrence.</i>	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence
	<i>A. Lawrence.</i>	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence
Ald. 13th ward.	<i>A. Lawrence.</i>	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence
	<i>A. Lawrence.</i>	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence	A. Lawrence

* Elected mayor April 1, 1884; resigned as alderman of Fifth ward April 2, 1884. † Resigned Feb. 25, 1884. ‡ Elected March 15, 1884. § Resigned Feb. 27, 1884. || Elected March 15, 1884. ¶ Elected at special election held April 19, 1884, to fill vacancy occasioned by the resignation of Geo. A. Pillsbury, 1884. (a) Resigned March 10, 1887, to take effect March 25, 1887. (b) By act of legislature transferred to Eleventh ward for the unexpired part of his term. (c) Died Aug. 18, 1889, and Dr. F. E. Hanson elected Sept. 10, 1889, to fill the unexpired term of D. G. Thompson. (d) Resigned as alderman of Fifth ward April 2, 1884, to fill the unexpired term of D. G. Thompson.

ELECTIVE CITY OFFICERS.

E. C. BABB,	-	-	-	-	-	-	Mayor.
EDER H. MOULTON,	-	-	-	-	-	-	Treasurer.
JOHN F. CALDERWOOD,	-	-	-	-	-	-	Comptroller.
GEORGE D. EMERY,	-	-	-	-	-	-	Municipal Judge.
STEPHEN MAHONEY,	-	-	-	-	-	-	Special Municipal Judge.
ED. M. VAN CLEVE,	-	-	-	-	-	-	Justice of the Peace E. D.
GEORGE S. GRIMES,	-	-	-	-	-	-	“ “ N. D.
ACE P. ABELL,	-	-	-	-	-	-	“ “ S. D.

APPOINTIVE CITY OFFICERS.

ROBERT D. RUSSELL,	-	-	-	-	-	-	City Attorney.
CHAS. F. HANEY,	-	-	-	-	-	-	City Clerk.
ANDREW RINKER,	-	-	-	-	-	-	City Engineer.
J. C. PLUMMER,	-	-	-	-	-	-	City Assessor.
FRANK L. STETSON,	-	-	-	-	-	-	Chief Engineer of Fire Dept.
C. L. SNYDER,	-	-	-	-	-	-	Superintendent of Poor.
J. M. HAZEN,	-	-	-	-	-	-	Inspector of Buildings.
DR. C. A. CHASE,	-	-	-	-	-	-	City Physician.
DR. S. S. KILVINGTON,	-	-	-	-	-	-	Commissioner of Health.
JOHN WEST,	-	-	-	-	-	-	Superintendent of Work House.
D. T. DAVIES,	-	-	-	-	-	-	Inspector of Meats.
A. G. MOSHER	-	-	-	-	-	-	Sealer of Weights and Measures.
A. P. ANDERSON,	-	-	-	-	-	-	Inspector of Street Lights.
RUFUS ROBERTS,	-	-	-	-	-	-	City Weigher.
WILLIAM COLLINS,	-	-	-	-	-	-	Engineer City Hall.
JOHN G. STERRETT,	-	-	-	-	-	-	Janitor City Hall.
FRANK T. GAYLORD,	-	-	-	-	-	-	Elevator Att'd City Hall.
							Bridge Watchmen,
							Poundmasters,

STREET COMMISSIONERS.

JOHN FOLEY,	-	-	-	-	-	-	-	First Ward.
J. H. BROWN,	-	-	-	-	-	-	-	Second Ward.
HUGH WILSON,	-	-	-	-	-	-	-	Third Ward.
ROBERT McMULLEN,	-	-	-	-	-	-	-	Fourth Ward.
J. M. COLE,	-	-	-	-	-	-	-	Fifth Ward.
E. NEWMAN,	-	-	-	-	-	-	-	Sixth Ward.
C. M. SPILLMAN,	-	-	-	-	-	-	-	Seventh Ward.
JAS. S. TRIPP,	-	-	-	-	-	-	-	Eighth Ward.
JOHN FLEMMING,	-	-	-	-	-	-	-	Ninth Ward.
W. R. MEDCALF,	-	-	-	-	-	-	-	Tenth Ward.
C. M. MATHEWS,	-	-	-	-	-	-	-	Eleventh Ward.
WILLIAM MARR,	-	-	-	-	-	-	-	Twelfth Ward.
G. S. BICKNELL,	-	-	-	-	-	-	-	Thirteenth Ward

The Street Commissioners are appointed by the City Council for a term of one year.

ELECTION OF ALDERMEN.

AN ACT, To amend Section One, Chapter Two of the Charter of the City of Minneapolis, enacted by the Legislature of the State of Minnesota, and approved April 3rd, A. D. 1889.

SECTION 1. The elective officers of the City of Minneapolis shall be a mayor, a treasurer, a comptroller, members of the city council and the members of such other boards as this charter shall create and declare to be elective officers of the city.

The city council shall consist of three (3) aldermen from each ward in the city until the first (1st) Monday in January, one thousand eight hundred and ninety-one (1891), and thereafter shall consist of two (2) aldermen from each ward, to be elected by the qualified voters in their respective wards.

The aldermen shall each hold office for the term of four (4) years from and after the first (1st) Monday in January next following his election: *Provided* that the aldermen who were elected at the general election held in November, one thousand eight hundred and eighty-eight (1888), and qualified under such election, shall continue in office until the expiration of the term for which they were elected.

At the general election to be held in November, one thousand eight hundred and ninety (1890), and at each general election held every two years thereafter, there shall be elected one (1) alderman from each ward, to serve for the term of four (4) years from the first (1st) Monday in January, next following his election.

CITY COUNCIL.

The City Council is composed of thirty-nine aldermen, three from each ward in the city, elected two for two years and one for four years, term of office beginning with the first Monday in January, 1889.

OFFICERS.

E. M. JOHNSON,	-	-	-	-	-	-	-	-	President.
J. C. STERLING,	-	-	-	-	-	-	-	-	Vice President.
CHAS. F. HANEY,	-	-	-	-	-	-	-	-	Clerk.

FIRST WARD.

JOHN T. MCGOWAN,	-	-	-	-	-	-	-	-	Four years.
JOSEPH INGENHUTT,	-	-	-	-	-	-	-	-	Two years.
FRED BRUESHABER, Jr.,	-	-	-	-	-	-	-	-	Two years.

SECOND WARD.

E. M. JOHNSON,	-	-	-	-	-	-	-	-	Four years.
F. C. BARROWS,	-	-	-	-	-	-	-	-	Two years.
V. M. SMITH,	-	-	-	-	-	-	-	-	Two years.

THIRD WARD.

GEO. A. DURNAM,	-	-	-	-	-	-	-	-	Four years.
C. P. ENSTAD,	-	-	-	-	-	-	-	-	Two years.
JOHN A. GILMAN,	-	-	-	-	-	-	-	-	Two years.

FOURTH WARD.

E. G. POTTER,	-	-	-	-	-	-	-	-	Four years.
EMERSON COLE,	-	-	-	-	-	-	-	-	Two years.
S. B. LOYE,	-	-	-	-	-	-	-	-	Two years.

FIFTH WARD.

C. P. LOVELL,	-	-	-	-	-	-	-	-	Four years.
H. W. BRAZIE,	-	-	-	-	-	-	-	-	Two years.
THOS. DOWNS,	-	-	-	-	-	-	-	-	Two years.

SIXTH WARD.

SAM'L HUNTER,	-	-	-	-	-	-	-	-	Four years.
CHRIS. ELLINGSEN,	-	-	-	-	-	-	-	-	Two years.
J. A. SWANSON,	-	-	-	-	-	-	-	-	Two years.

SEVENTH WARD.

JOHN H. PARRY,	-	-	-	-	-	-	-	-	Four years.
J. M. MELOY,	-	-	-	-	-	-	-	-	Two years.
O. P. FLATEN,	-	-	-	-	-	-	-	-	Two years.

EIGHTH WARD.

MELVIN GRIMES,	-	-	-	-	-	-	-	-	Four years.
J. C. STERLING,	-	-	-	-	-	-	-	-	Two years.
DANIEL G. THOMPSON,*	-	-	-	-	-	-	-	-	Two years.

NINTH WARD.

JAS. H. BRADISH,	-	-	-	-	-	-	-	-	Four years.
ERIK RHODE,	-	-	-	-	-	-	-	-	Two years.
HERMAN VOGT,	-	-	-	-	-	-	-	-	Two years.

*Died August 18th. 1889. Dr. F. E. Hansen elected September 10th. 1889. to fill the unexpired term of Daniel G. Thompson.

TENTH WARD.

VINCENT REEVES,	-	-	-	-	-	-	-	Four years.
W. J. BURSSELL,	-	-	-	-	-	-	-	Two years.
B. H. BILLINGS,	-	-	-	-	-	-	-	Two years.

ELEVENTH WARD.

JOHN A. BLICHFELDT,	-	-	-	-	-	-	-	Four years.
JAY W. PHILLIPS,	-	-	-	-	-	-	-	Two years.
OTTO A. FULTZ,	-	-	-	-	-	-	-	Two years.

TWELFTH WARD.

WM. B. WOODWARD,	-	-	-	-	-	-	-	Four years.
J. E. VANDEWAKER,	-	-	-	-	-	-	-	Two years.
A. S. ADAMS,	-	-	-	-	-	-	-	Two years.

THIRTEENTH WARD.

D. D. FARNSWORTH,	-	-	-	-	-	-	-	Four years.
GEO. H. WARREN,	-	-	-	-	-	-	-	Two years.
J. S. GRAY,	-	-	-	-	-	-	-	Two years.

STANDING COMMITTEES FOR 1889-1890.

Ways and Means—Cole, Lovell, Barrows, Warren, Reeves.

Salaries—Vandewaker, Hansen, Cole, Fultz, Gilman.

Claims—Potter, Gray, Gilman, Downs, Grimes.

Taxes—Lovell, Sterling, Smith, Meloy, Adams.

Licenses—Meloy, Enstad, Brueshaber, Grimes, Bursell.

Accounts of City Officers—Swanson, Farnsworth, Gray, Gilman, Vandewaker.

Public Grounds and Buildings—Downs, Vandewaker, Enstad, Hunter, Flaten.

Bonds of City Officers—Billings, Hunter, Loye, Blichfeldt, Brueshaber.

Roads and Bridges—Cole, Bradish, Lovell, Parry, Woodward.

Street Grades and Additions—Hunter, Flaten, Farnsworth, Brueshaber, Bursell.

Fire Department—Ellingsen, Woodward, Rhode, Phillips, Barrows.

Water Works—Barrows, Meloy, Fultz, Warren, Downs.

Gas—Smith, Blichfeldt, Hansen, Loye, Vogt.

Sewers—Vogt, Downs, Swanson, Durnam, Smith.

Markets—Gray, Reeves, Potter, Ingenhutt, Ellingsen.

Printing—Fultz, Bursell, McGowan, Flaten, Hunter.

Railroads—Warren, Cole, Phillips, Barrows, Meloy.

Police—Phillips, Farnsworth, Ingenhutt, Enstad, Rhode.

Health and Hospitals—Brazie, Potter, Sterling.

Cancellation—Rhode, Ingenhutt, Woodward.

Ordinances—Bradish, Vandewaker, Sterling.

Rules—Adams, Brazie, Bradish.

Workhouse—Sterling, Billings, Vogt, Warren, Brazie.

Paving—Reeves, Lovell, Durnam, McGowan, Blichfeldt.

Bethany Home—Parry, Grimes, Loye.

Underground Wires—Woodward, Vogt, Billings, Potter, Ellingsen.

Supervisors of the Poor—McGowan, Swanson, Phillips, Smith, Parry, Adams, Durnam, Gray, Loye, Bradish, Brazie, Reeves, Hansen.

SALARIES FIXED BY THE LEGISLATURE.

	Per Annum.
Mayor	\$2,000
Aldermen	720
Aldermen, (after first Monday in January, 1891,).....	500
City Clerk, (he to turn in to the city treasury all fees received by "public law;" the city to pay all clerk hire).....	3,100
Commissioner of Health	2,000
Municipal Judges.....	3,000
Clerk Municipal Court.....	1,800
Deputy Clerks	1,000
Stenographers	1,200

SALARIES FIXED BY CITY COUNCIL.

SCHEDULE OF SALARIES FOR 1889-1890.

	Per Annum.
City Attorney.....	\$4,500
Assistant City Attorney	1,500
Second Assistant Attorney	1,200
Stenographer for City Attorney.....	780
City Treasurer, (treasurer makes no return of interest to the city, to be paid for necessary extra help subject to approval of council)....	1,200
Teller, City Treasurer.....	1,200
Book-keeper	800
City Comptroller, (no extra allowance for clerk hire).....	3,100
Deputy City Comptroller	1,200
Assistant City Clerk.....	1,000
Clerk City Clerk	1,000
Clerk City Clerk	840
Clerk City Clerk	780
City Assessor	2,000
Clerk, Assessor, per day.....	3.50
Superintendent of Poor.....	1,500
Clerk, Superintendent of Poor.....	900
Inspector of Buildings.....	2,000
Assistant Inspectors.....	1,000
Clerk, Inspector.....	600
Inspector of Meats.....	1,400
Assistant Inspector of Meats.....	1,200
City Physician.....	1,500
Assistant City Physician.....	900
Street Commissioners.....	900
Matron City Hospital.....	600
Sealer Weights and Measures, fees and	200
City Weigher	720
Pound Masters.....	500
Engineer of City Hall.....	1,000
Assistant Engineer of City Hall	800
Elevator Attendant.....	720
Mayor's Secretary	600
Janitor, Municipal Court	480
Inspector of Street Lights	1,166
Janitor, City Hall.....	1,300
Bridge Watchman, Steel Arch and Suspension.....	600
" " Plymouth Avenue.....	500
" " Twentieth Avenue North	500
" " Franklin Avenue.....	500
" " Tenth Avenue South.....	500
" " Washington Avenue South.....	500

CITY ENGINEER'S DEPARTMENT.

Per Annum

City Engineer, (engineer to hire and fix salaries of subordinates, subject to approval of city council).....	\$4,500
Ass't Engineer in charge of sewer department.....	1,900
" " " general " 	1,800
" " " streets.....	1,500
" " " bridges and buildings.....	2,000
" " " water works.....	1,800

Draughtsman.....	840
Chief clerk.....	Per Month \$115
Assessment clerk.....	75
Ass't sewer engineer.....	95
Sewer department clerk.....	75
Bookkeeper.....	80
Sidewalk superintendent.....	85
Transit men.....	\$90 to 115
Level men.....	75 to 90
Draughtsmen.....	75 to 85
Rodmen and chainmen, per day.....	\$2.25 to 2.50

FIRE DEPARTMENT.

Per Annum

Chief Engineer.....	\$3,000
First Ass't Chief Engineer.....	1,800
Second " ".....	1,500
Superintendent of fire alarm.....	1,500
Linemen.....	900
Superintendent of horses.....	1,200
Engineer of steamers.....	1,200
Ass't " ".....	900
Captains.....	1,020
Lieutenants.....	900
Pipemen, truckmen and drivers, first class.....	900
" " " second class.....	840

WATER WORKS.

Supervisor.....	\$1,500
Registrar.....	2,000
Cashier.....	1,000
Clerk.....	900
Meter inspector.....	840
Inspector.....	840
Clerk.....	780
Inspector.....	840
Street foreman.....	1,500
Hydrant men.....	800
Engineer North Side pump house.....	1,800
Ass't " " " " " ".....	1,200
Oilers " " " " " ".....	840

HEALTH DEPARTMENT.

Medical inspectors.....	\$960 to \$1,000
Sanitary ".....	1,000
Clerk.....	480
Dumpkeepers.....	\$540 to 600
Superintendent quarantine hospital.....	600

WORK HOUSE.

Superintendent work house.....	\$1,500
Engineer.....	Per Month \$83.33
Ass't engineer.....	45.00
Hallmaster and bookkeeper.....	45.00
Guards, each.....	45.00
Driver.....	45.00
Night watch.....	45.00
Cook.....	60.00
Matron.....	40.00
Deputy superintendent.....	83.33

VALEDICTORY ADDRESS

OF

His Honor, A. A. AMES, Mayor of the City of Minneapolis,

JANUARY 7TH, 1889.

To the Honorable, the City Council of the City of Minneapolis:

GENTLEMEN:—I appear before you at this time for the purpose of retiring from the position of chief executive of this city. With this meeting I conclude three terms as mayor—five years and nine months—the longest term of service ever before given you by a citizen in this position. Notwithstanding I go from the place a wiser but a poorer man, I still do not regret the time I have given to the service of the city. “I point with pride” to the record of the last administration and “view with alarm” the change which has taken place from a rule of the democracy—the people—to a government of our friends, the well known enemy. During the last two years and nine months’ administration I feel that the retiring council has done much which will, in the future, resound to their credit. While they have been the friends of labor and acceded to all its reasonable demands, still they have been just in all their dealings with capital. They passed the ordinance making eight hours a legal day’s work on the public works of this city, and thereby gave employment to at least one-third more workmen. They also abolished the contract system, as far as was practicable, and saved to the treasury the enormous profits which had heretofore been reaped by contractors. Out of these savings the extra laborers required by the eight hour system have been paid without detriment to the city.

LEGISLATION.

The greatest calamity which has been inflicted upon the City of Minneapolis for several years has been the meetings of the legislature. Through this agency our charter has been tinkered up to suit the private whims of obscure citizens, and we are to-day cursed with conflicting laws unintelligible to citizens and inexplicable by the courts.

I respectfully recommend to the incoming council the appointment of an intelligent committee on legislation, whose duty it shall be to see if harmony cannot be made out of the present chaos. What Minneapolis now needs is home rule. The state should accord us the privilege of managing our own local affairs. You should petition the bucolic members of that august body to accord to the citizens of this great metropolis, with its quarter of a million of inhabitants, the knowledge of knowing what is for their best interests in its government. One of the most important dangers which threatens our future are legislative provisions for the appointment of boards and commissions to control our affairs, the members of which are not elected by the people, whose millions of dollars they are authorized by legislative enactments to expend. In this connection I desire to recommend to you an important and radical change in local affairs. I believe that the mayor, coming as he does fresh from the people, should be clothed with absolute power as far as their government is concerned. He is directly answerable to them for all his public acts, and if the people make a mistake it is easily

remedied at the ballot box. If the president of the United States is competent to choose men as his chiefs of the various departments under him, and the governors of the various states are considered competent to choose the heads of departments, why should the mayor of the city of Minneapolis not be considered competent to select and be responsible directly to the people, the officers who have charge of the various departments of our city government? The plan which I suggest has been thoroughly tried in the city of Philadelphia, and has been found to bring officials more closely in connection with the people's interests than any other. In this city we have too many officials who are only accountable for their acts to some intervening power between the taxpayers and their public servants.

I therefore recommend the abolishment of every board and commission created by legislative act, and to place the responsibility of our local government upon the chosen representatives of the people. In this connection allow me to caution you against the inroads which fanaticism and religious intolerance have recently been making upon the rights of the people. Every new member of this city council should remember that all nationalities who have sworn allegiance to this country and who are good citizens are entitled to all the rights ascribed to the most favored. The poor here should be the peers of the rich. But alas they are not! We already see that the offenses of a poor man are ten times more grievous than the same offense committed by a man of monied station. If this principle be followed it will, eventually, lead to revolution.

OUR PROSPERITY.

Our marvelous growth and wonderful development into the position of metropolis of the great Northwest has not, I take it, been impeded by the past administration, notwithstanding the opposition given it by our opponents and the press. Minneapolis stands to-day as the queen city of the great Northwest, holding the keys of the great situation and enjoying the fruits of the extraordinary labor of her enterprising citizens. As in evidence of this, I have but to cite you to the report of our Building Inspector, Henry J. Bauman, who, in his annual report, says that he has issued 4,339 building permits; estimated cost, \$10,198,837. Capital is as sensitive as a sensitive plant, and had its possessors not had confidence in the great future of this city there would have been no such showing as this. Our commercial, flour, lumber and other manufacturing industries have been so thoroughly commented upon by the public press as to require no allusion at my hands.

LAW DEPARTMENT.

I desire particularly to call attention to the report from the city's law department. Hon. Seagrave Smith, the city's attorney, in his report, the details of which are well known to us all, shows a record of ability never surpassed by any of his predecessors. By this ability he and his able assistant, Lars M. Rand, Esq., have meted even justice to offenders and saved the city thousands of dollars from threatened damage suits.

FINANCES.

It is a pleasure to report that the city of Minneapolis is financially solid and stands A 1 in the money marts of the world; her bonds command as high a premium and her credit is as stable as that of any city in this country. Her assessed valuation is \$127,069,756; her bonded debt is \$5,524,500; the amount in her sinking fund for the redemption of the interest on these bonds and the payment of them as they become due is \$425,823.

INTERNAL IMPROVEMENTS.

By reference to the report of Andrew Rinker, our able City Engineer, I find that during the year of 1888 there have been five and three-fourths miles of cedar block pavement laid, at a cost of \$141,478; also twenty-six and one-half miles of curb and gutter stone, at a cost of \$133,450; also sewers and sewer tunnels, nine and two-fifths miles, at a cost of \$385,377; also of water mains nineteen and one-half miles, at a cost of \$262,126. In a recapitulation, commencing in 1882, when the first paving of this city was done, it appears that we now have twenty and one-half miles of streets paved, at a cost of \$794,208. The first curb and gutter was laid in 1882; since then there has been a little over 61 miles placed in position, at a cost

of \$367,120. Sewerage was begun in this city in 1871; since then there has been a little over forty-nine miles of it constructed. We have eight bridges across the Mississippi river, connecting the East and West divisions of the city. The total cost has been \$1,156,000. The first water mains of any consequence, laid in this city, was about the year 1868; we now have about one hundred and thirty-one and one-third miles. There has been ordered for the year of 1889 eight and one-half miles of paving; sixteen and two-third miles of curb and gutter; eighteen and two-third miles of sewers; seventeen and one-half miles of water mains.

THE SOLDIERS' HOME.

Since my last message, through the foresight and enterprise displayed by your honorable body, in connection with other well known citizens, the location of the Minnesota Soldiers' Home has been secured within our city limits. Fifty-two acres of land, comprising the peninsula lying between the Mississippi river at Minnehaha creek was purchased at a cost of \$55,000 and tendered to the state as a site. Your honorable body pledged the faith of the city to the issuance of bonds for this amount. A number of our leading citizens upon your pledge secured by note the purchase money and the site was accepted by the state officials. Since then the board of directors of the soldiers' home have erected two substantial brick cottages, each capable of housing and caring for at least 55 inmates. It is now contemplated by the board of directors to erect a headquarters building, hospital and two more cottages during the coming summer.

PARKS AND BOULEVARDS.

If there is any one thing more than another with which our good people can point to with pride, it is our parks, park-ways and boulevards. Our parks are so located as to afford the laboring classes easy access, and each one is a beauty spot and breathing place for them and their children. The park-ways and boulevards have been magnificently adorned with shrubbery and trees until they have become a source of great pleasure, not only to our own people but to all visitors to the city. While on this subject, I desire to recommend the opening of a boulevard from or in the vicinity of Lake Harriet down the romantic banks of Minnehaha creek to a point just below Minnehaha falls; also the purchase by the city of about four acres of land now occupied temporarily by the Minnesota Soldiers' Home, and the presentation of the latter to the state for soldiers' home purposes; also the construction by the city of a bridge from this last named property over to and in connection with the plat already made for driveways upon the property already donated by our city for soldier home purposes; also the laying out of a boulevard from the soldiers' home up and along the banks of the Mississippi river to connect with our boulevard and park system in the southern portion of the city. When this shall have been done, and I earnestly hope that it may be, no city in the Union can boast of a better or more magnificent system of parks, park-ways and boulevards than Minneapolis will have. If the plan which I have marked out is consummated I feel that the enterprise of the city of St. Paul will be willing to extend their boulevard and park system to connect with us at the soldiers' home; also that the state could be induced to erect a bridge across the Mississippi river at the soldiers' home, thereby connecting the two cities' boulevard system.

During last winter our park board inaugurated what has been known as winter sports, which consisted of a speeding track for horses on Lake Calhoun, skating rinks on our various lakes, and toboggan slides in many of the parks. They proved a great success, affording much recreation and amusement to our people. I recommend that these sports be continued and extended in order to afford our citizens a good excuse for staying at home during the winter season.

THE POLICE FORCE.

Of this, one of the most important departments of the city, I shall have but little to say. It is largely composed of thoroughly competent men, and is well officered. The control of it was, under the influence of local fanatics, aided by the country members of the last legislature, transferred from the mayor to a board of police commissioners, who were not selected by the people; since then the principal duties of the policemen have been to watch out

for commissioners—the arrest and conviction of offenders against state laws and ordinances being a secondary consideration. I believe that the control of the police force by a commission, not answerable to the people for their acts, is detrimental to the public service. I therefore recommend that your committee on legislation earnestly labor for the repeal of the police commission law and restore to the mayor the absolute control of the police force of the city and all responsibility in connection therewith.

FIRE DEPARTMENT.

Little need be said in reference to the fire department of the city of Minneapolis, which has a world wide reputation for efficiency second to none in the country. Under the able management and discipline of Chief Engineer Frank L. Stetson, and the support which your honorable body has given him, our citizens feel secure as far as skill in fighting fire is concerned.

CITY LIBRARY.

One of the monuments to Minneapolis public enterprise is the erection of the public library building, a beautiful and substantial stone structure at the corner of Hennepin avenue and Tenth street. The amount of money already expended in the construction is about \$186,000. When completed the structure will have cost about \$200,000.

WATER WORKS DEPARTMENT.

Since my last report the water works department of the city has made an important stride in the right direction by establishing a pumping station at Shingle Creek, about two miles above the present source of supply. The plant will cost the city, when completed, about \$141,000, and will have a capacity of thirty million gallons per day, which is equal to that now given from the two central pumping stations. During the year about nineteen and one-half miles of water mains have been laid. The cost of laying the mains has averaged about 37 cents per foot under the eight-hour system, while under the contract system the year before the cost was 47 cents.

OUR SCHOOLS.

During the year there has been expended in the construction of school buildings and other necessary school expenses \$942,000, of which about \$273,000 was for salaries of teachers. Our numerous and substantial school structures and the efficiency of our school system is a source of pride to every Minneapolitan.

CITY HALL AND COURT HOUSE.

Among the gigantic strides of enterprise exhibited by Minneapolis has been the erection of a city hall and court house to be used by the city and county. It will have cost \$2,000,000 when completed, and will occupy the block bounded by Third and Fourth avenues south, Fourth and Fifth streets, and when completed will be one of the most magnificent structures of its kind in the country, and a monument to the enterprise of our citizens.

HEALTH DEPARTMENT.

To Dr. S. S. Kilvington, and his corps of assistants, the city is much indebted for their labors during the last year. From personal observation I am convinced that the city has never before been so well policed for health as it has been under him. He has had under his personal supervision and quarantined 3,621 cases of contagious diseases. Meat Inspector, Thomas F. Mea, has been thoroughly efficient in his department, and has condemned 145,511 pounds of meat which was offered for sale and was unfit for human consumption.

During the year and nine months just past there have been 5,100 deaths and 7,324 births.

CARE OF THE POOR.

During the year the supervisors of the poor have expended \$24,934.61 under the supervision of M. R. Curtiss, the able and efficient superintendent. There has also been established a city hospital under the direct supervision of Dr. James H. Dunn, assistant city physician. All the sick poor have been cared for at a much less expense than during former years, when they were farmed out to private hospitals. I feel that the kind attention given

the sick poor of our city, by Superintendent Curtiss and Dr. Dunn, is worthy of special commendation.

BETHANY HOME.

This institution is one of the most charitable and praiseworthy in our midst. It has done a noble work in the past in the way of redeeming fallen women and caring for their helpless infants. It is a private charity, and as such should receive a generous support from those charitably disposed. I do not believe that the public funds, no matter from what source they may have been procured as long as it was in accordance with law, should be diverted from their legitimate channel or appropriated to the support of private institutions. I have been heralded through this community as an enemy of Bethany Home. I am not. I have nothing but praises to sound on behalf of the noble ladies who have done such good samaritan work in this institution. My experience as a physician in this city has shown that a very considerable number of the inmates of Bethany Home, coming as they have under my professional and official eyes, are residents of other localities. Many of them have demonstrated to me that their seducers or wealthy keepers were willing to pay all their expenses, and with this in view I have sent them to Bethany Home. It is not only a charitable institution, but a private and reformatory institution as well. While I believe it should receive a reasonable support from those charitably disposed, still it should not become a city blood-sucker; nor should the private reformatory ideas of any sect be carried out at the public expense. If we had to we could care for the unfortunate inmates of Bethany Home at our city hospital at one-hundredth part of the present expense, when coupled with the reformatory detention of six months now exacted of Bethany Home inmates. I hope this great charity may continue to prosper, but not at the expense of the public treasury.

SAINT ANTHONY FALLS.

The general government has expended a large amount of money for the preservation of our water-power; they refuse to do any more in this direction. The fact stares us in the face that the apron which protects the old falls from the undertow current of the water is in a badly decayed condition. In my opinion it has now become necessary that the city shall take charge of these works and secure for it the proper legislation to make all necessary repairs, and to assess a proper proportion of said costs against property immediately interested and benefited.

RECOMMENDATIONS.

First. That the newly elected members do not spend the most of their time and influence in trying to get the major portion of the money in the public treasury appropriated for improvements in their respective wards.

Second. That no more street lamps be ordered for cow pastures, meadow lands, corn fields and other broad acres, whereby real estate dealers expect 9,000 per cent on the money which they have invested.

Third. That none of the incoming officers shall so allow his head to become swollen that he cannot be recognized by his friends or with courtesy transact the legitimate functions of his office.

Fourth. That liberal aid be given the Minneapolis Industrial Exposition in the way of illuminating our principal streets, ample police protection to the building and its exhibitors, and the entertainment of the guests of the city during the exposition.

Fifth. That proper legislation be secured whereby a contingent fund may be set aside from the treasury for the use of the chief executive, to be expended by him in such cases as he may deem best for the public interest. This fund should be overlooked by the finance committee of your honorable body only, and the results not in detail reported to you for approval. This method has been adopted by many of the leading eastern cities, and if followed here would raise an enormous financial weight from the mayor's pocket book.

Sixth. That each member of the new council so conduct himself during the next two years that his constituents will not be led to believe that he really thinks that he should be the next mayor of the city.

Seventh. That base ball, courting in the parks, and whisky drinking on Sunday be strictly guarded against, especially by city officials.

Eighth. That the salvation army be allowed all the privileges usually accorded to other religious fanatics.

Ninth. That the incoming administration carefully observe the record of its predecessor, and that an equal showing be made in the shape of work for the amount of money expended.

Tenth. That at the end of your respective terms you shall not be accused by the republican press of the city and state as having been boodlers.

Eleventh. That after you have labored long and arduously for what you consider to be for the best interests of your constituents, that you do not explode the old chestnut, when you are defeated for a re-election, that republics are ungrateful.

IN CONCLUSION.

I now desire to return to the council who have served during my administration, my most sincere thanks for the courtesy which they, and the other city officials, have always been pleased to extend to me as mayor. And in addition I bear cheerful testimony to their uniform courtesy and devotion to the duties of their offices with the public.

I now take pleasure in introducing to the incoming council my successor, the Hon. E. C. Babb, who comes fresh from the people.

A. A. AMES, Mayor.

INAUGURAL ADDRESS

OF

His Honor, E. C. BABB, Mayor of the City of Minneapolis,

JANUARY 7TH. 1889.

Mr. President and Gentlemen of the City Council :

Having been called with you by the suffrages of our fellow citizens to the care and direction of the affairs of this city for the next two years, we have met together to-day to inaugurate our official service.

In accordance with custom, it is incumbent upon me, as mayor, to give you at this time "such information" and to recommend to you "such measures" as I "may deem advantageous to the city."

It is with especial gratification that I assume the duties of my office, associated with you as the city's council. Many of you are new to the work you have been summoned to do, but you have been chosen to your responsible position, honored by the general expectation and confidence that you will endeavor, in your public service, to advance only the welfare of the city, while those of you who were members of the council whose term has just closed, bring to the new administration justly earned individual reputations for work well done, together with a helpful experience in, and a wide knowledge of municipal affairs. Association with you is therefore cause for personal gratification.

As we begin our work, in view of what has just been said, it is but reasonable to expect that the record to be made by you, will amply commend itself to the approval of our fellow citizens. You are now representatives of the whole community. For the time being any partisan character you may have is laid aside. Your duties are to be done without prejudice or favor, without bondage to any political party, social class or religious sect.

One of the common temptations to which municipal legislatures are exposed is to the enactment of numerous laws for specific objects. With the best of dispositions, this tendency opens the way to most of the errors which limit the usefulness of these bodies. I feel it a duty, therefore, to advise you to allow as little special legislation in your work as possible.

Minneapolis has become one of the large cities of the country. Its growth during the last eight years has been unparalleled. From a population amounting to about 46,000 at the last United States census, it has increased until now more than 200,000 people dwell within its limits. Its assessed valuation is now more than \$127,000,000. Its public improvements are of very great value and serviceableness. In manufactures and commerce, it is rapidly taking an advanced position, and soon will be abreast of many communities which a few years ago were far in its front. In educational and social privileges, it compares favorably with any other city in the country. Minneapolis is fast becoming a metropolis of the first rank. Evidently then, the care and direction of its corporate affairs have become in the highest degree important and demand the most painstaking and capable service.

The city's financial status, the supervision of the expenditure of the large sums of money placed at your disposal, the planning and operation of the agencies necessary to secure and to advance public safety, comfort and health

the proper encouragement and nurture of a public policy by which the industrial and commercial prestige, and the educational and social progress of the city may be maintained and advanced, lay exacting responsibilities upon the city's council of increasing gravity. It is advisable, therefore, that I should speak of these various matters specifically and somewhat at length.

THE CITY'S FINANCIAL STATUS.

The financial status of the city is a subject which must be carefully kept in view in your financial legislation.

The city's bonded debt amounts now to the sum of \$5,524,500, distributed as the books of the comptroller and treasurer show. The assessed valuation of the city, which will remain at about the present figures for the next two years, is \$127,069,756. By general agreement hitherto, our bonded indebtedness may not exceed 5 per cent of the city's valuation, so that the limit of indebtedness which at present may be reached is at \$6,353,487. Deducting the present debt from these figures, there is left for a possible increase of our municipal obligation, about \$829,000. This statement, it will be observed, shows that the existing limit of indebtedness for the city has been closely approached.

From 1874 to the beginning of 1886, the city had assumed bonded obligations to the amount of \$3,124,000. During the past two years, however, this sum has been added to by \$2,400,000, leaving for the near future a margin of further increase of but about \$829,000.

A glance at these figures makes it evident that so far as the sources of income for municipal expenditures from the issuance of bonds at present allowable are concerned, you will be very much limited. It is evident, too, that the remaining source of revenue for the city's expenses and expenditures, direct taxation, must be used to supply whatever deficit may arise from this narrow margin of possible indebtedness; that is, if the present rate of outlay is to be continued. But of course the tax rate should not be increased, if increase can possibly be avoided. On the contrary, every effort should be used to make this rate lower. Circumstances, therefore, force particularly upon your legislation the duty of caring for, and of advancing the public welfare as befits the needs of the city, and of doing this work, for the present and near future at least, with less means available than have been at command in the past. How this shall be done is a question of first importance. It is one that you are compelled to meet and answer. As to how you shall deal with it, I have no definite method to propose. It is, of course, not advisable, nor does it appear to be necessary that it should compel you to adopt a niggardly financial policy, but it does call for the application to your legislation of the strictest business principles; that is, of a rigid economy, prudence, calculation and thorough honesty.

There are doubtless some items of unnecessary expenditure that could be done away with, and there are probably some necessary expenses which could be lessened without injury to the general welfare. Places for such retrenchment will appear in the course of your investigations. But whatever revenue is really necessary to the proper administration of the city's government, and to the development of the admirable public improvements now in the course of construction, or that may become desirable, the progressive sentiment of our citizens will doubtless in time enable you to secure.

I make these statements concerning the city's financial status, simply that the gravity of your responsibilities may be clearly known as you assume them.

PERMANENT IMPROVEMENTS.

In a statement handed to me by the city engineer it appears that there have been ordered for the present year, permanent improvements, the cost of which is summarized as follows:

Paving	\$239,946
Curb	97,287
Sewers	574,190
Water mains	240,100

Amounting in all to.....\$1,151,523

In order to provide for the cost of these improvements, you have at your

disposal the revenue derivable from the direct tax authorized by law, of two mills on the dollar of the assessed valuation of the city, to constitute a permanent improvement fund, the money paid into what is known as the revolving fund for the present and former years, and the returns of bonds which may be issued. The resources summed up are in round numbers:

Direct tax.....	\$250,000
Revolving fund.....	274,000
Total	\$524,000

Deducting this sum total from the above estimated cost of the improvements now ordered, we have a debit balance of \$626,000 to provide for. For this the city must become indebted, but as stated before, under the present condition of things, we have a margin for bonded indebtedness of but \$829,000. When, therefore, the public improvements ordered for this year shall have been provided for, the city, under the present 5 per cent. rule, will have exhausted all but about \$200,000 of the income it may derive from the issue of bonds.

How to obtain, during the present year, the means for other municipal expenses which are usually met by loans, and how to provide for the permanent improvements necessary in the next year, with this \$200,000, is a problem left to you for solution.

THE NEW COURT HOUSE AND CITY HALL.

In connection with this subject of permanent improvements and the bonded indebtedness of the city, it is in place to call your attention to the financial status of the city in its relation to the construction of the county and city building, which has been found necessary to meet the growing needs of the community.

This structure, which will, when finished, be one of the handsomest, most commodious and convenient of its kind in the country, will probably take four or five years to complete. The authorized expense to be incurred in its erection is \$1,500,000. So far, the sum of \$343,188 has been spent for this purpose, of which \$321,558 was paid for the building site (the block bounded by Third and Fourth avenues south and Fourth and Fifth streets), \$21,130.11 for the excavation necessary for the foundation of the edifice, and \$500 for a temporary enclosure. This cost has been met by the issue of \$335,000 in bonds on the county's credit, which yielded a premium of \$2,000, and \$50,000 in bonds on the city's account, yielding a premium of \$380.

The board of commissioners in charge of the work has now \$25,810 in its treasury and city bonds as yet unsold to the sum of \$200,000. In view of the necessity for continuing the work thus begun, and for the probable need for other purposes of the \$200,000 spoken of in the preceding section, you will be obliged to meet this additional financial problem. I lay these matters before you simply that you may see at the outset of our administration the gravity of the work imposed upon us.

THE WATER SUPPLY.

One of the most important matters affecting the city's welfare is the amount and quality of the water supplied to the people for industrial and domestic purposes, and for protection against fire. The source of supply used hitherto has been sufficient for all needs. Of late years, however, through the extraordinary growth of our population, it has generally been believed that the water distributed through the city from the present works is not desirable for domestic uses. In compliance with popular demand, new water works have been constructed in the northern part of the city, above any sources of contamination from city sewage or street and factory drainage. These works at Shingle Creek will be ready for operation about the 1st of March, next. They are among the most complete works of the kind in the country. They will have a capacity for delivering fully thirty million gallons of water daily, and the works are so built that their capacity can be increased to sixty million of gallons. These works will probably be sufficient for the city's wants for ten years. In view of the abundance and excellence of water thus to be provided, the service of the works at the falls will no longer be needed, and, on account of popular sentiment, will not be desirable. I recommend; there-

fore, that as soon as the North Minneapolis works are ready for use the present stations be abandoned and given over to such other uses as may be found for their effective motive power.

THE FIRE DEPARTMENT.

The fire department of the city is, I believe, one of the best equipped and most efficient in the country. It commands the admiration of all who examine into its organization and observe its work. The immunity of the city for so long a period now from disastrous conflagration is owing largely to the well disciplined promptness, strength and skill of this organization.

THE HEALTH DEPARTMENT.

There is no subject affecting the well being of a community more than the ways and means for its proper sanitation. In every well ordered modern community, therefore, there should be an intelligent, active and authoritative health board. Cleanliness of streets and alleys, inoffensive and innocuous removal of offal and garbage from factories and houses, inspection and control over buildings and places likely to create filth and to breed disease, vigilance against the introduction or spread of infectious or contagious disease in the community, power in general to provide for the sanitary welfare of the people, should be vested in some competent organization. The efforts made to this end in this city hitherto deserve much commendation, as far as they have gone, but many difficulties have prevented them from being sufficient for our growing needs. It is now time that a health department, such as should exist in a city of the size, wealth and intelligence of this, should be formed and put at work here. I would therefore recommend that your committee on health and hospitals be organized with this need prominently in view, and that it investigate this matter thoroughly and evolve some plan by which the proper sanitation of the city shall be secured.

THE FALLS OF ST. ANTHONY.

I feel it my duty to call your attention to the condition of the apron which was built by the United States government a few years ago to protect the falls of St. Anthony. The government for some time past has declined to make any appropriation for the purpose of completing it or keeping it in repair. As a consequence, it is in great danger of being badly injured—it may be destroyed—at any time of high water.

This disaster would injure the dyke which was also built by the general government at a cost of about \$500,000, and if this were damaged our great water power would be imperiled, and would soon disappear unless enormous expenditures of money were made to protect it. I learn that the water power companies cannot agree between themselves as to the repairs necessary, or as to their liabilities or duties in the matter. This city has too much property invested in its water works and bridges, to say nothing of its interest in the general loss that would come from the consequent depreciation of all real estate values, to allow this calamity to happen.

This matter, therefore, should be taken hold of promptly and vigorously. A bill is now before congress which provides for the turning over to the city of all the rights of the government to the improvements at the falls. Whether this bill becomes a law or not, self preservation must be observed, and the time has come when further delays are dangerous.

If the water power companies and the parties most directly interested cannot be made immediately to repair or replace the apron, the city must see that it is done.

For this purpose I suggest that the necessary legislation to enable the city to do this—to raise money for this purpose, if necessary—and granting power to assess a proper proportion of the expense upon the property immediately benefited, be secured without delay at the coming session of the state legislature.

This is a matter which, as I have said, calls for immediate attention and prompt action.

THE PUBLIC PARKS.

The Minneapolis park system, as projected, is one of the most admirable in the world, and, as far as developed, justly deserves the pride of our citizens. This praiseworthy work is the result of the energy of a wisely directed, economical, energetic park board, under the presidency of Hon. C. M. Loring, aided by the generous co-operation of a number of our fellow citizens.

At present we have a park area of more than a thousand acres, and of more than thirteen miles of boulevard driveways, costing less than one-third of their present valuation, which is upward of a million and a half dollars.

Within the city limits are several beautiful lakes, three of which are already connected by wide driveways, one of these being partially and the other wholly encircled by generous boulevards. One of these lakes, the Lake of the Isles, is being rapidly transformed into a lake park, which will, when completed, be unequalled for beauty among parks.

The proposed new boulevard from Lake Harriet to Minnehaha falls, two hundred to four hundred feet wide and five miles in length will be unsurpassed for the charm of its scenery. The prospective state park at Minnehaha falls in connection with Hiawatha park on the opposite bank of the Mississippi river, will serve to unite with our own park system that of St. Paul, thus creating a magnificent park system, which will be the finest in the United States. In order to secure this result it seems advisable that the means at the disposal of the park commissioners should for the present be used chiefly for the acquisition of the land yet necessary to it.

THE PUBLIC SCHOOLS.

The growth of our public schools is a source of great satisfaction to the community, and excites surprise among those who are familiar with the record it has made, but it has placed heavy and increasing responsibilities upon those who have the interests accompanying it in charge. Last June, two years ago, there was in this city 28 public schools, 292 teachers, and 14,192 pupils. Last June there were 39 schools, 406 teachers and 17,997 pupils. At present there are 45 schools with a probable enrollment, by the end of June next, of 20,000 pupils. The public school system, and its operation in this city are among the most thorough and effective in the country. The present administration of the schools is wisely conservative, but it is also progressive. No effort has been spared to secure the best and most approved agencies needed for success in every department. I call attention especially to manual training introduced upon recommendation of the present school superintendent, and taught at four schools, sewing and other branches of industrial training. Our four high schools show exceptional development. Commendable effort has been exerted by the board of education to provide school accommodations to meet the extraordinary demands which have been made upon them. Many new buildings and additions have been erected, but there is still urgent demand for more school facilities. Seven or eight new buildings should be erected at once, in order to provide seating capacity for pupils in crowded schools who are now permitted to attend only half a day, and for 2,000 additional pupils who may be expected to apply for admission during the year. Double sessions are now held in 10 different buildings, thus depriving large numbers of pupils in the primary grades of half the privileges which the schools should afford. I earnestly recommend that you take this important subject under consideration, to the end that some way may be found for procuring the money required to meet these pressing needs. Every child of school age in the city should have suitable school accommodations.

THE PUBLIC LIBRARY.

Closely allied with the subject of public schools, is our interest in public libraries, reading rooms, and associated facilities for general culture. In 1885 the legislature added a chapter to our city's charter which created the Library Board of the City of Minneapolis. The board was authorized to establish and maintain public libraries and reading rooms, galleries of art and museums for the use and benefit of the inhabitants of the city. To enable the board to realize the objects contemplated, the act creating it gave the board power to levy a yearly tax upon the property of the city, and to do whatever else might be found necessary to make the board thoroughly efficient. The act was indeed so liberal and comprehensive as to excite the admiration of librarians and trustees of public enterprises of a like character throughout the country.

After an authorized issue by the city of bonds for \$100,000, and private subscription for a like amount, a proper building site was purchased and the erection of the library begun. This building, which is now approaching completion, is admired by all, and will be, when finished, scarcely second to any other

building erected for a like purpose in the United States. In accordance with the provisions of the charter, which contemplate, in addition to libraries and reading rooms, the maintenance of galleries of art and museums for the instruction and entertainment of our people, the library building was planned and is being built with these objects in view. The library board charter provided that the board might enter into association with other organizations owning libraries or museums, upon such terms as would best promote the objects for which it was created. Upon this authority the library board, early in its existence, entered into an agreement with the Athenæum of this city, whereby the Athenæum library, already a good one, and certain, because of its fine endowment, to become most valuable, will be freely thrown open to the public. The library board have already appropriated a large sum of money for the purchase of books. Many have been bought and are now being catalogued. The board had received, up to January 1st, 1889, \$234,494.97, and had expended \$186,084.53.

The building when completed will have cost something over \$200,000. The charter under which our library board is acting contemplates the maintenance of public libraries and reading rooms, not merely one central library, which, wherever located, would necessarily be inaccessible to a large part of our population. This provision of the charter has not been overlooked by the board. For the present, of necessity, it cannot be complied with. But it has always been the intention of the board, as soon as it can be done, to establish reading rooms and distributing libraries in various parts of the city, with arrangements so made that the books of the central library will be at the ready command of all our citizens, no matter how remote their homes from the central building.

THE CITY'S RAILROAD POLICY.

Attention has been especially called recently by public discussion to the relations of the city and its railroads. This matter is one of so great importance to the welfare of the community that I am impelled to say a few words concerning it. A cordial co-operation of a community with these important factors in its development is always desirable. It appears to me, therefore, that in those improvements, made necessary by the operations of railroads in the city, which directly benefit both the roads and city, the city should in some measure share with the roads the expense required in making such improvements.

The proper division of expense is a matter of detail which could be decided upon as the separate cases were presented, but, as a directing principle, I am convinced that co-operation between the city and railroads, where mutual benefit is involved, is advisable, in order to reach the best prosperity of all interests concerned. I therefore commend this principle to you as advantageous to the city in your railway legislation.

MANUFACTURING INTERESTS.

Minneapolis has attained to a high place among manufacturing centers, and events indicate a yet more commanding position for the city in this direction.

Annual statistics have shown remarkable industrial gains for some time past. For the last year the estimated value of the products of our manufactures is at about \$80,000,000. Our commercial interests are very large, but the growth of the city has been advanced especially through the development of its manufactures. Our commanding industries are the production of flour and lumber; but other industries, notably those of agricultural implements, sash, doors and blinds, and furniture, are increasing with great rapidity. The encouragement of manufactures is thus made one of our privileges and duties, in devising measures for a larger prosperity for the city. Philadelphia, the largest manufacturing city in the country, has adopted a special policy, by means of which, chiefly, it has reached this eminence. Believing that its opportunity for growth lay mainly in the building up of its manufactures, it procured a statute from the Pennsylvania state legislature, by which the machinery in use within its limits was freed from taxation. The result has shown the wisdom of this act. The Philadelphia policy is therefore worth your consideration. Certainly the establishment and support of manufactures here should be generously encouraged as one of the best means to promote the city's further growth.

LABOR ORGANIZATIONS.

There are various other topics which naturally would find place in my inaugural address, but which, on account of limited time, I must pass by. There are questions of moral reform of great importance to the well being of the city which are so complex in their character and require so extended a discussion, that, under present circumstances, it is not advisable for me to attempt to deal with them. At a more convenient time I shall express what judgment I have formed concerning them.

One phase of social development, however, is becoming of so great moment that a word concerning it in passing is in place. The relations of capital and labor are of the most intimate character. Both capital and labor are necessary to the welfare of society, and general progress cannot be secured without their harmony and co-operation. The rapid organization now going on of laboring men into societies, so far as I can see, is capable of being made of great service to these men, and to the interests of labor in general, while there is no reason why it should be in any way a source of division between laboring men and those who represent what is called capital. I cordially recognize the importance of these labor organizations, and recommend that their official expressions of opinion on public matters receive just attention with all other expressions of popular judgment.

CONCLUSION.

In conclusion, I wish simply to reiterate what I said in beginning this address, that we have been summoned by our fellow-citizens to do a work which has become one of exceptional difficulty, and to express the hope that we may assume our duties with a sincere determination to do whatever lies in our power to perform these duties so that the best interests of our city may be advanced. I rely upon you, and upon all the departments of the city's government, to co-operate with me in our common work.

Should we thus labor together, holding the duties of our high positions always above selfish or ignoble aims, the account of our stewardship, when rendered two years hence, will be one of which neither we nor our fellow-citizens need be ashamed, and which will doubtless show that we have been enabled to do somewhat to promote the welfare of Minneapolis, whose progress and prosperity have already given it a leading place among American cities.

E. C. BABB,

Mayor.

RESOLUTION

IN MEMORY OF DANIEL G. THOMPSON, LATE ALDERMAN OF
THE EIGHTH WARD.

Resolved by the City Council of the City of Minneapolis:

Whereas, Death has removed from our midst an esteemed associate and friend in the person of Alderman Daniel G. Thompson, of the Eighth ward, we wish to place upon record some expression of our appreciation of him as a man and a public official; therefore,

Be it Resolved, That we do hereby express our sincere sorrow at the death of Alderman Thompson, feeling that in him the city had a faithful and conscientious representative and the community a member whose character and abilities gave promise of a most useful and honorable future.

In him we recognized such strongly marked traits of character; such high aims; such devotion to principle; such honesty of purpose, as to win our admiration and command our highest respect.

The expression used by him in his last speech in this chamber, "I should not do my duty to my constituents if I did not support this measure," is indicative of the motives which actuated the man, as duty was the great question with him.

We extend our sympathies to the friends and relatives of our departed colleague, realizing that a great personal loss has been sustained by those intimately associated with him in his lifetime; and the public has been deprived of the services of one who was conspicuous for his fidelity and rigid adherence to what he considered to be his highest duty.

Passed Aug. 20th, 1889.

E. M. JOHNSON,
President of the Council.

Attest:

CHAS. F. HANEY,
City Clerk.

Approved Aug. 22d, 1889.

E. C. BABB,
Mayor.

ANNUAL REPORT

OF THE

CITY COMPTROLLER

OF THE

City of Minneapolis

For the Year Ending December 31, 1889.

JOHN F. CALDERWOOD, - - Comptroller.

JOSHUA ROGERS, Deputy.

MINNEAPOLIS:
HARRISON & SMITH, PRINTERS.
1890.

CITY COMPTROLLER'S DEPARTMENT.

J. F. CALDERWOOD,

City Comptroller.

JOSHUA ROGERS,

Deputy Comptroller.

COMPTROLLER'S REPORT,

To the Honorable City Council:

GENTLEMEN—In compliance with section 16, chapter 3, I herewith submit a financial statement of the various departments of the city, the several wards thereof, the board of education and the library board. In the compilation of this report I have grouped under appropriate subdivisions the various items that make the total expenditure of each department, thus giving the "kernel without the chaff." In many instances where I thought the items of special interest to the public I have given them in detail. You can better understand what a full itemized report would mean when I state that my office has countersigned and delivered during the twelve months ending Dec. 31, 1889—11,089 warrants on the city treasurer; the warrants in many instances covering several items. The aggregate amount of warrants drawn during the year is as follows:

City Warrants.....	\$3,095,450.85
School board warrants.....	955,667.03
Library " ".....	127,202.99
Park " ".....	289,137.57
Total.....	\$4,467,458.44

This does not necessarily signify that these various divisions have expended this amount of money, as warrants are necessary in the adjustment of funds as between the comptroller and the treasurer. We have eliminated the transfer of funds in this report, so that the debit of any particular fund shows only the disbursements, and the credit the net receipts. This we have done to avoid the possibility of the footings of the funds being misleading to anyone who did not take the trouble to analyze the account.

TOTAL RECEIPTS AND DISBURSEMENTS.

The following is the net receipts and disbursements on account of the various funds, including the various ward, park, library and school funds for the twelve months ending Dec. 31, 1889.

<i>Disbursements.</i>	
Current Expenses (Genl. Fund).....	\$898,255.34
Permanent Improvement Fund.....	1,045,320.19
Improvements.....	\$992,502.41
Taxes refunded.....	3,656.16
Taxes annulled.....	49,161.62
Interest Paid.....	247,612.50
Water Works.....	279,394.48
Construction.....	\$155,660.56
Taxes annulled.....	36,540.01
Taxes refunded.....	14,826.79
Refund of advances.....	3,534.30
Current expenses.....	68,832.82
Thirteen Ward Funds.....	447,865.76
Street sprinkling and sidewalk.....	
Labor and material.....	\$260,019.87
Taxes annulled.....	138,921.60
Taxes refunded.....	42,923.90
Library Board.....	127,202.99
School Board.....	958,367.03
Running expenses.....	\$444,895.43
Improvements.....	203,971.60
Notes paid.....	309,500.00
City Park Fund.....	289,137.57
General expenditures.....	\$268,137.57
Loans paid.....	21,000.00
Total disbursements.....	\$4,293,155.86

Receipts.

Library Fund.....		\$90,141.81
Subscription.....	\$27,095.00	
Taxes.....	37,171.97	
Interest, etc.....	852.09	
Sundries.....	22.75	
Notes discounted.....	25,000.00	
School Fund.....		991,557.31
Notes discounted.....	\$302,624.99	
Taxes.....	483,701.11	
Proceeds of bonds.....	203,610.83	
Sundries.....	1,620.38	
General Fund.....		988,249.72
Taxes.....	\$659,778.72	
Licenses.....	266,170.47	
Rents.....	3,186.67	
Light.....	500.04	
Impounding.....	358.65	
City scales.....	117.45	
Municipal court.....	38,672.67	
Engineer's permits.....	10,481.48	
City clerk.....	6,799.70	
Sundries.....	2,183.87	
Permanent Improvement Fund.....		1,144,087.57
Mill tax.....	\$253,575.41	
Proceeds of bonds.....	428,100.58	
Sundries.....	2,414.50	
	\$684,090.49	
Special assessment taxes revolving.....	\$197,078.24	
Proceeds of bonds.....	197,967.84	
Advances.....	64,837.37	
Sundries.....	113.63	
	\$459,997.08	
Water Works.....		267,177.65
Water receipts.....	\$157,514.22	
Taxes.....	103,868.52	
Advances.....	4,687.00	
Sundries.....	1,107.91	
City Park Fund.....		289,892.17
Proceeds of bonds.....	\$142,139.56	
Taxes.....	96,188.47	
Proceeds of notes discounted.....	36,000.00	
Sundries.....	15,564.14	
Interest fund.....		241,345.47
Ward funds.....		457,682.17
Total receipts.....		\$4,450,133.87

Recapitulation.

Total receipts.....	\$4,450,133.87
Total disbursements.....	4,293,155.86
Credit Balance.....	\$156,978.01
Balance on hand Jan. 1, 1889.....	206,462.80
Cash on hand Jan. 1, 1890.....	\$363,440.81

In the above schedule of expenditures is included \$228,279.78 for taxes annulled and paid by engineer's certificates; \$52,817.78 of which is for sewers, paving and curb and gutter; \$36,540.01 for water mains, and \$138,921.99 for sidewalk tax annulled.

In the above schedule of expenditures is also included \$84,886.92 taxes refunded, of which \$27,136.73 is for sewer, curb and gutter and paving tax, \$14,826.29 for water mains, \$42,923.90 sidewalk tax refunded.

GENERAL FUND.

The total disbursements on account of the general fund for all purposes for the twelve months ending December 31, 1889, is \$898,255.34. The total amount expended on account of the general fund in the various departments for which appropriations were made is \$866,362.87. The total amount expended outside of appropriations, \$31,892.47, as follows:

Tax refund penalty.....	\$15.02
Legal damages by suit.....	621.47
Legal damages without suit.....	1,464.12
Bethany Home (part of fines collected under charter).....	2,700.00
	\$4,800.58

Total amount expended under the "Contingent Fund Act" (which shall not exceed \$10,000 in any one year; each expenditure must be by resolution and require a three-fourths vote of the entire council), is \$8,391.20, as follows:

Relief of Dakota sufferers.....	\$1,400.00
"G. A. R." Memorial day.....	175.00
Interest on note given for purchase of Soldiers' Home site.....	1,669.80
Street illumination during Exposition 1889.....	3,000.00
Entertainment of Pan American delegation.....	1,917.15
Entertainment of Montreal city council.....	229.25
	<hr/>
	\$8,391.20

Total amount expended under special acts of the legislature, \$7,605.25, as follows:

J. V. DeMott vs. Ninth ward.....	\$1,116.65
Vincent Reeves vs. Tenth ward.....	1,000.00
Illuminating Nicollet avenue during Exposition of 1888.....	4,488.60
Award for the apprehension of the murderers of Edward Tollefson.....	1,000.00
Extra salary of City Clerk and salary of employees since May 1, 1889.....	1,348.70
	<hr/>
	\$7,605.25
Refund on plumbers' permits and expense of repairing streets for conduits.....	\$9,521.74

The item of \$9,521.74 as shown by exhibit "A" as a disbursement, is not an expense, as the amount is covered by a deposit, which appears as a credit to the general fund.

APPROPRIATIONS.

As will be seen by exhibit "A," the total amount of the appropriations for the various departments on account of the general fund for the year ending March 1, 1890, is \$863,900. The total disbursements on account of the appropriations is \$723,492.37, leaving a balance unexpended \$140,407.63, which amount, if properly distributed among the various departments would be sufficient to carry the departments through the months of January and February to the beginning of the new appropriations, provided the ratio of expense would remain the same as it has been for the past twelve months.

OVERDRAFTS.

As will be seen by exhibit "A," roads and bridges and city assessor's department stands with an overdraft. The former of these accounts is entitled to a credit from the permanent improvement fund, and the latter has been advanced money from its appropriation of 1890, for the purpose of preparing a new set of plats for the assessments of 1890.

MAKING APPROPRIATIONS.

More care should be exercised by the council in considering the wants and necessities of the various departments so as not to impair the service of any department for want of funds, or force the department to ask for an overdraft, which is pernicious and in direct violation of the law. The permitting of any department to exceed its appropriation renders the action of the council which made the appropriation a farce. The council should do one of two things—either make the appropriation sufficient to meet the necessary demands of the department, and the comptroller keep the departments within their appropriations, or abolish the annual farce of making appropriations and let each department make a "grab bag" of the general fund of the city.

NO DEFICIENCY—A SURPLUS.

For the first time in eight years the general fund will usher in the first of March, 1890, with a surplus, providing the ratio of expense remains the same for January and February as it has been for the past twelve months.

The following are the deficiencies in the general fund since 1882:

March 1, '83, Deficiency.....	\$33,424.06
" 1, '84, ".....	41,641.53
" 1, '85, ".....	37,532.89
" 1, '86, ".....	35,721.81
" 1, '87, ".....	38,261.96
" 1, '88, ".....	39,307.81
" 1, '89, ".....	93,933.50
" 1, '90, Surplus, \$7,000.	

SINKING FUND.

On folio — will be found a copy of the act which creates and provides for

the increase of the sinking fund of the city for the redemption of all city bonds.

SECURITIES IN THE SINKING FUND.

There is now in the sinking fund \$535,358.74; \$417,000 of which is Minneapolis city bonds, and \$118,358.74 in certificates of deposit on the various banks of Minneapolis, drawing four or five per cent interest. See Exhibit "H."

CAN WE PAY OUR BONDED DEBT?

As to our ability to pay the present bonded debt of the city with the one (1) mill tax on the assessed valuation, I submit the following:

Providing the assessed valuation increase three per cent each year, (in the last eleven years it has increased on an average of 18 per cent each year,) which would increase the sinking fund in the same ratio, and deducting the bonds as they mature, and adding four per cent annual interest to the balance in the sinking fund, (the fund now earns over four per cent semi-annual interest,) the sinking fund will have, after paying the present bonded indebtedness, a balance of \$3,085,815.50.

REGISTERING BONDS AND SECURITIES IN THE SINKING FUND.

I would recommend that the bonds and other securities which are now, or that may become, a part of the sinking fund, be registered in the name of the "Board of Sinking Fund Commissioners," and that their transfer be made only with the consent and signatures of the full board. This would relieve the treasurer of the board of sinking fund commissioners from personal liability, and insure greater protection to the city.

TOTAL BONDED DEBT.

The entire bonded debt of the city January 1, 1889, which includes bonds issued for all purposes was \$5,524,500. This amount has been increased during the year \$962,000, making the total bonded debt, January 1, 1890, \$6,486,500.

SCHOOL DISTRICT BONDS.

Seventy-two thousand dollars of the bonded debt increase for 1889, was for bonds issued by school districts 1, 5, 9, 93, 119 and 121, before they became a part of the city. At the time of the passage of the acts in which the city assumed the indebtedness and these districts became a part of the city, no definite statement of indebtedness was filed with or assumed by the city, and it was not until I called your attention to the fact, and your action of November 27, that a complete schedule was filed and the indebtedness became a matter of record on the books of the city.

BONDS PAID.

The following bonds were paid during the twelve months ending Dec. 31, 1889:

Date.	Issued for.	Nos.	Each bond.	Total	Time, yrs.	Rate, per cent.	When due.
May 1, 1874	Fire Dep't.	41-64	\$500	\$12,000	30	8	May 1, '89
July 1, 1872	Falls Imp.	170-199	500	15,000	30	8	July 1, '89
Oct. 9, 1880	School Dist. 119	9-10	500	1,000	9	8	Oct. 9, '89
Total.....				\$28,000			

BONDS CANCELLED.

The following bonds were cancelled during the twelve months ending December 31, 1889.

Date.	Purpose.	Nos.	Time, years.	Rate, per cent.	Each bond.	Total.
July 1, 1884.	Parks.	452-555.	30.	4%.	\$1,000.	\$32,000.

BONDS ISSUED.

The following bonds were issued during the twelve months ending December 31, 1889.

Permanent improvement fund.....		\$425,000.00
Franklin avenue bridge.....	\$ 30,000.00	
General improvements.....	395,000.00	
Board of education.....		200,000.00
Revolving fund.....		150,000.00
Park fund.....		175,000.00
Total.....		\$950,000.00

PREMIUM ON BONDS.

The average premium received on the sale of bonds for the twelve months ending December 31, 1889, is 92-100 of one per cent.

Issue of February 1, selling at a discount of 1,474-1000 per cent.

Issue of June 29, selling at a premium of 2,639-1000 per cent.

As will be seen from Exhibit "N," the price received for Minneapolis 4 per cent 30 year bonds improved with each succeeding sale, until the premium of 2,639-1000 per cent. was received, being the highest premium ever received for Minneapolis bonds, and the highest price ever received up to the date of last sale for municipal bonds in the northwest.

P. S.—The issue of January 15th, 1890, \$205,000, sold for a premium of 3.799 per cent, the highest premium ever paid for any four per cent. bonds in the northwest.

REVOLVING FUND BONDS.

The permanent improvement revolving fund bonds should not be considered as a liability, or if they are so considered, there should be included in our list of assets a corresponding amount, as these bonds are issued for the deferred payments due on the sewer, curb and paving tax, and are secured by the unpaid tax which makes the bonds equal to or better than a first mortgage. All other bonds should be considered as liabilities when the total value of the purpose for which they are issued is considered as an asset.

REVOLVING FUND BONDS SHOULD BE DEDUCTED FROM BONDED DEBT.

The bonds issued for the deferred payments due from property benefited under the revolving fund act, should be deducted from the bonded indebtedness in considering the 5 per cent. limit, as the issue of these bonds is in the nature of a loan to the abutting property, and in the adjustment of the revolving fund account, when the deferred payments have been collected, there should be in the fund a sum which, when credited to the sinking fund, would be sufficient to pay all bonds issued under that act.

DISCONTINUE THE ISSUE OF REVOLVING FUND BONDS.

The city is restricted in the issue of bonds to a 5 per cent. limit of its assessed valuation. The substantial maintenance of this provision is not only declared to be a part of the contract with the present bondholders, but it is a safeguard against the reckless and extravagant issue of bonds. It is this 5 per cent. restriction that places Minneapolis bonds at the head of the list of all municipal securities west of Detroit, Mich.

I would recommend the discontinuance of the issue of 30-year bonds on account of the revolving fund, and in lieu thereof the issuance of certificates with five coupons attached, one of which shall be payable each year from the one-fifth collected on account of the revolving fund. These certificates would be secured by the tax due, which would make them better than a first mortgage, and the city would be relieved from any liability. This arrangement I would recommend for two principal reasons:

First. The city will need all the latitude possible under the 5 per cent. restriction (in view of the fact that we have nearly reached the limit to issue bonds), to pay the city's part of the improvements that are necessary to keep pace with the constantly increasing demands of a rapidly growing city.

Second. In the manner in which the account is kept it is as unjust as it is unnecessary to issue a 30-year 4 per cent. bond for deferred payments which are fully paid with interest in five years.

INCREASE IN BONDED DEBT.

Exhibit "M" shows the per cent. of increase in the bonded debt as compared with the per cent. of increase in the assessed valuation.

1881—	Bonded debt increase,	4 1-10 per cent.;	ass'd val. increase,	4 per cent.
1884—	" " "	27 1/2 " " "	" " "	37 4-5 per cent.
1889—	" " "	17 1-5 " " "	" " "	7-10 of 1 per cent.

INTEREST ON THE BONDED DEBT.

The outstanding bonds draw various rates of interest as shown in exhibit "L," the highest being 10 per cent., the lowest 4 per cent., and the average rate of interest on the entire bonded debt of the city is 4.73 per cent.

BOND MARGIN.

1 The present bond margin on which we can issue bonds for all purposes before we will have reached our limit, is five per cent of the assessed valuation plus the amount of the sinking fund, \$535,358.74, which makes the present margin \$403,949.79. This margin will be increased July 1st, 1890, by the amount collected on account of the sinking fund, about \$125,000, together with the interest accruing on the sinking fund, about \$25,000; also 5 per cent. on the 10 per cent. probable increase on the assessed valuation; all of which, added to the present margin of \$403,949.79, will make a total margin for the 18 months beginning January 1st, 1890, of \$603,949.79.

ISSUE OF CITY BONDS.

The issue of city bonds for all purposes should emanate from one body. The plan of subdividing the financial department of the city to such a degree as to give any one board or commission power to issue city bonds at pleasure is a bad precedent, and is liable to prove a source of extravagance. While the creation of the various boards leads to efficiency, yet there ought to be an absolute central responsibility in the issue of bonds, and the increase of the city's indebtedness.

TAXES—SPECIAL ASSESSMENTS.

The city council, who is the supposed guardian of the tax-payer's interests, should lose no time in correcting the present system of making and collecting special assessments. The evil is each year growing, and it cannot but be that a day of reckoning will come when the tax-payers of this city will demand a reason for the continued operation of a system which.

First. In many cases deprives them of the use of hard-earned money paid in good faith, and arbitrarily, for what they never receive.

Second. A system that compels the tax-payer to pay in excess of the cost of the improvement.

Third. A system which creates "rebates" and makes their collection profitable, at the expense of the tax-payer.

Fourth. A system that provides no method for the return of money collected in excess of the cost, or for improvements annulled, and as a result there is due property owners to-day thousands of dollars for improvements which have never been made, or, if made, the assessment was in excess of the cost.

Fifth. A system that deprives the city of the use of tax collected from the time of collection to the time of settlement with the county treasurer.

Sixth. A system that forfeits to the proper funds the penalties which amount to thousands of dollars each year.

Seventh. A system that entails a large amount of expense and unnecessary work on the city, and divides the keeping of the accounts between the city and county in such a manner that we have no check upon the county, or system of keeping the accounts.

Eighth. A system that necessitates the ordering of public improvements before the council can determine the demand or necessity for the improvements, as all improvements for the following year under the present system must be ordered before the 20th day of August.

Ninth. A system that permits and compels annulments at a great expense to the city and an annoyance, inconvenience and a loss to the tax-payers.

Tenth. A system that has a record for 1889, of \$228,279.78, for taxes annulled, and \$84,886.92, taxes refunded.

Eleventh. A system that does not enable the city to determine the amount of tax levied and the amount and who are delinquent.

Twelfth. A system that makes the payment of the tax under the "Revolving Fund Act" arbitrarily payable in fifths, instead of allowing the taxpayer the privilege of paying the full assessment at the time of the first payment, as many would prefer to do.

Thirteenth. A system that makes the keeping of the "Revolving Fund Account," as it should be for the protection of the bonds issued under the act an impossibility.

CITY COLLECT ITS SPECIAL ASSESSMENTS.

I would recommend that such legislation be secured as will enable the city to collect the taxes for all special improvements for the following principal reasons:

- First. The city would have the use of the money as soon as collected.
- Second. The city would have the benefit of all penalties accruing by reason of delinquency in the payment of taxes.
- Third. The assessments could be levied at such a time as would enable the city council to base the assessments upon the actual cost of the work, as under the present system it is necessary to assess an amount in excess of the cost, thereby causing a rebate, a portion of which only under the present plan can be returned to the property owner, and that is optional with the council.
- Fourth. There is no provision made under the present system for the return of any rebate, and the necessity for such a provision would be obviated.
- Fifth. The city could by collecting its special assessments so regulate the time of making the assessments as to enable those in authority to determine carefully what improvements are needed and to so regulate the assessment rolls that there would be no annullments.
- Sixth. We could determine accurately the total amount of the tax levied, whether the assessments have been regularly and properly entered, also the amount of, and who are delinquent.
- Seventh. We could keep our own accounts, prove the correctness of the assessment rolls and adjust to the satisfaction of the taxpayers any differences that might arise.
- Eighth. The additional expense of the city collecting its own special assessments would be nominal, as there is now a large expense connected with the city engineer's department in making a partial transcript of the county auditor's assessment rolls to assist the city engineer in the adjustment of assessments.

WARD FUNDS—SIDEWALKS.

The total sidewalk assessments of 1888 for 1889, was \$191,992.66. The total tax collected was \$172,751.41, of which \$138,921.99 was paid in engineer certificates for tax annulled. Seventy-two per cent. of the tax levied was annulled, and 81 per cent. of the tax paid was paid in engineer certificates, which means that 72 per cent. of the expense in making these assessments is a loss to the tax-payers—not only a loss, but an inconvenience and annoyance to those who received their certificates of annulment. There is a large percentage of people, whose sidewalks have been annulled, who have paid their taxes and have received no rebate.

The question now presents itself, what is the occasion of these wholesale annullments? It is the fault of the present system of making assessments, in permitting assessments being made for sidewalks when the streets are not graded, and the street fund is not sufficient to grade them. If the streets were graded before the sidewalks were ordered there would be no necessity for the present amount of annullments. Section 16, chapter 8, of the city charter, reads as follows:

“It shall be the duty of the city council, before ordering the construction of any new sidewalk, to cause the ground on which it is built to be properly graded.”

An incentive in the past to the wholesale and promiscuous ordering of sidewalks has been to create a surplus, and affording the opportunity of the pernicious practice of transferring money from the sidewalk fund to the street fund, thus enabling the ward to expend in street work an amount in excess of the amount raised by mill tax.

The following is a list of the insolvent sidewalk funds, and the amount that the liabilities are in excess of their assets January 1, 1890:

First ward.....	\$1,965.44
Second ward.....	3,056.92
Third ward.....	2,530.30
Fourth ward.....	2,948.38
Fifth ward.....	4,052.72
Eighth ward.....	1,614.18
Eleventh ward.....	1,814.06
Twelfth ward.....	485.83

What I mean by the above list of "insolvent sidewalk funds" is this: If the above specified wards were to refund the tax unrefunded, or lay the sidewalks that have been ordered, paid for and not annulled, they would be short the amounts above specified.

There are three principal reasons for the cause of this deficiency.

First. The lack of system in making the assessments and properly checking them.

Second. Failure of street commissioners to report for assessment the repairs made on sidewalks.

Third. The total loss of penalties in the tax refundments.

STREET FUNDS.

I beg leave to call your attention to the practice of property owners advancing money to ward funds for the purpose of doing street grading. By this practice large property owners are able to secure the improvement of streets in their vicinity in advance of their less opulent neighbor. This practice is contrary to the charter—which says, that the wards have no authority to expend any more money for the purpose named or for any other purpose, in any one year, than that authorized to be raised by taxation of the taxable property of the ward. This common practice has led to the pledging of ward funds in advance from year to year until it often happens that the newly elected aldermen find the ward funds of their administration have been absorbed by money advanced for improvements during their predecessor's term.

This illegal and pernicious practice will have to stop and those who have been advancing money for improvements to their property will have difficulty in being reimbursed, as the charter and the decisions of the court will absolutely govern my actions in this matter.

AUDITING CLAIMS.

The city charter, section 18, chapter 11, provides "that all claims and demands against the city before the same shall be allowed by the city council, and all claims against the board of education and the library board of the city of Minneapolis, before same shall be allowed by said board, shall be audited and adjusted by the City Comptroller." Under the present system this is, has been, and always will be a farce, and claims against the city have not been, are not being, nor can they ever be under the present system, properly examined. Thousands of dollars of claims are paid every month which for the want of system have not been properly examined. It has been the pleasure of your honorable body to approve and order paid, claims which have never seen the inside of the comptroller's office.

Think of the "Committee on Claims" passing upon a budget of 900 claims which they had never seen before, amounting to \$190,000, in one and a half hours, and all received their approval as being correct. Imagine the city comptroller, in connection with his regular duties, examining, auditing, adjusting, classifying and entering on a schedule 900 promiscuous claims from a bill for postage stamps to a "junketing trip" east, amounting in all to \$190,000, and doing it all in twelve hours.

I would recommend that every claim against the city be referred to the head of the department for which the purchase was made, and by him certified to as being correct, in proper form on the bill, and by him then referred to the committee in charge of the department for their approval. Then, they should be submitted to the city comptroller, and by him submitted to the committee on claims, who should not recognize any bill without the proper endorsements as above, with the right to reject any claim if in their judgment there is any irregularity. The custom of presenting bills directly to the council, and by them being ordered paid before they have been passed upon by the proper committee, is pernicious.

AUDITOR'S JOURNAL.

The heads of the various departments of the city should be required to keep an auditing journal, in which all bills approved by the committee should be entered, giving the name, date of bill, description, amount, when approved and when ordered paid by the council, and distribution of the

CITY BOOK-KEEPING.

DELINQUENT TAXES.

City, 1888 and prior years.....	\$318,643.99
Board of education, 1888 and prior years.....	63,023.35
Library board, 1888.....	6,075.98
Total.....	<u>\$387,743.32</u>

March 15th, 1889, I recommended that the amount reported as being delinquent by the county auditor be verified. My communication was, with a degree of reluctance, reported upon favorably by the committee. The work was begun, but owing to the fact that the progress made was slow and expensive, the work was abandoned before completion. I would recommend that the work be taken up and finished at an early date, that we can determine what portion of the amount delinquent is worthless and the amount that is good: see to it that prompt action is taken to enforce the collection.

ASSETS AND LIABILITIES.

Schedules A, B, C, D, E, F, G, H, and I, show in detail the property of the city and the various boards thereof, a summary of which is as follows:

City property.....	\$8,061,161.75
Library board, building and real estate.....	320,654.01
School board, buildings and real estate.....	2,009,300.00
Park board, parks and parkways.....	3,918,400.00
Court house.....	550,000.00
Miscellaneous personal property.....	\$14,949,515.76
Total.....	\$15,161,426.37

To the above list of city assets should be added the bonds issued on account of the revolving fund. These bonds amount to \$505,000, and are covered by the deferred payments due under the revolving fund act. Deducting from the total value of city property the total bonded debt we have a balance of \$9,179,926.37.

SIDEWALK FUNDS.

Another evidence of the lack of system is the present bankrupt condition of the sidewalk funds.

THE REVOLVING FUND

is in a precarious condition, and as it stands to-day has not a sufficient credit with which to pay its outstanding bonds, simply because it has not received its proper credits, through a lack of system.

ENGINEER CERTIFICATES.

We have every confidence in the gentlemen connected with the city engineer's department, who issue engineer certificates for taxes annulled and certify as to tax rebates. During 1889 they have issued nearly a quarter of a million in engineer certificates and certified to ninety thousand in tax rebates. These engineer certificates are accepted by the county treasurer in lieu of money in the payment of taxes, and they are accepted by the city treasurer in lieu of money in the tax settlement from the county. There is no system in vogue, neither has there been any to determine whether these certificates have been regularly and properly issued. I beg leave to call your attention to the amount of detail incidental to the drawing, receipting for, countersigning and paying a warrant for any claim against the city, but in the matter of the issuance of one quarter of a million dollars in engineer certificates and certificates for tax rebates, the whole responsibility is left in the hands of one man, with no system for verifying the correctness or regularity of his work.

IN CONCLUSION.

I beg leave to say that I have not always agreed with a number of your honorable body in questions that came within the jurisdiction of my office, and it is not reasonable to expect that we should; but if we are frank and sincere with one another, honest with ourselves and our constituents, we may differ widely on questions and still maintain that amicable intercourse and proper regard for the feelings of others which constitutes an essential and important factor in municipal as well as individual prosperity.

If my report of the city finances, together with any statements or recommendations that I may have made, shall in any way aid your honorable body in your future labors and deliberations, or throw any light on the problems of the city's finances which are continually presenting themselves to you for solution, then the writer will feel abundantly repaid for any expenditure of time and thought required in the performance of what must otherwise become a dry and perfunctory task. I wish to express to your honorable body, to my able deputy, to those connected with the various departments of the city, my sincere thanks for the courtesies extended during the past year, and for a co-operation which has materially lightened the cares and facilitated the work of the comptroller's office.

Respectfully submitted,

JOHN F. CALDERWOOD,

City Comptroller.

CITY PROPERTY.

INCLUDING PROPERTY UNDER THE CONTROL OF THE VARIOUS BOARDS OF
THE CITY.

In the various items of city property, and the property of the various boards, is included the present cash value of the land and the original cost of the buildings and improvements.

Schedule A.

PAVEMENT—		
Cedar block.....	\$573,451.36	
Granite block.....	289,492.88	
Boulder.....	4,756.35	
		\$867,700.59
CURB AND GUTTERS.....		373,446.43
SEWERS AND TUNNELS.....		2,446,552.10

Schedule B.

BRIDGES OVER MISSISSIPPI RIVER—		
Franklin avenue.....	\$143,430.23	
Washington avenue.....	106,367.48	
Tenth avenue south.....	160,000.00	
Suspension.....	221,024.50	
Steel arch.....	185,161.81	
Stone arch over east channel.....	50,965.92	
Plymouth avenue.....	68,500.00	
Twentieth avenue north.....	109,110.03	
Hennepin Island, east channel.....	4,894.18	
		\$1,049,454.15
BRIDGES OVER BASSETT'S CREEK—		
First street north.....	\$6,000.00	
Second street north.....	6,922.49	
Washington avenue north.....	8,685.00	
Third street north.....	10,633.63	
Fourth street north.....	8,040.29	
Fifth street north.....	1,974.12	
Lyndale avenue.....	6,149.68	
Fifth avenue north.....	1,942.00	
Sixth avenue north.....	2,945.74	
Tenth avenue north.....	6,899.54	
Western avenue, No. 1.....	1,980.39	
Western avenue, No. 2, Upton avenue.....	1,311.07	
Cedar Lake road.....	9,233.75	
Eighth avenue north.....	224.00	
		\$72,941.70
SUNDRY BRIDGES—		
University avenue, over University creek.....	\$1,246.52	
Fourth street S. E., over University creek.....	7,309.70	
Seventh avenue S. E., over University creek.....	1,370.65	
Lyndale avenue, over Minnehaha creek.....	1,000.00	
Minnehaha avenue, over Minnehaha creek.....	500.00	
Chicago avenue, over Minnehaha creek.....	500.00	
Lyndale avenue, over Shingle creek.....	1,899.27	
Sixth avenue south, over Mill Co.'s canal.....	10,004.52	
		\$23 830.66
VIADUCTS AND BRIDGES OVER RAILWAY TRACKS—		
Washington avenue viaduct.....	\$35,902.64	
Plymouth avenue viaduct.....	6,142.07	
Holden street and Western avenue bridge.....	2,739.21	
Lyndale avenue bridge.....	34,727.51	
		\$79,511.42

Schedule C.

BOARD OF EDUCATION.

Adams.....	Land.....	\$50,000		
	Buildings.....	25,000	Total.....	\$75,000
Bancroft.....	Land.....	700		
	Buildings.....	500	Total.....	1,200
Bremer.....	Land.....	6,300		
	Buildings.....	25,000	Total.....	31,300
Bryant.....	Land.....	1,400		
	Buildings.....	500	Total.....	1,900
Calhoun.....	Land.....	14,000		
	Buildings.....	25,000	Total.....	39,000
Clay.....	Land.....	20,000		
	Buildings.....	20,000	Total.....	40,000
Clinton.....	Land.....	18,000		
	Buildings.....	33,000	Total.....	51,000

Corcoran	Land	8,000		
	Buildings	18,000	Total	26,000
Douglas	Land	18,000		
	Buildings	5,000	Total	23,000
Emerson	Land	28,700		
	Buildings	30,000	Total	58,700
Everett	Land	9,000		
	Buildings	25,000	Total	34,000
Franklin	Land	33,000		
	Buildings	20,000	Total	53,000
Garfield	Land	20,000		
	Buildings	20,000	Total	40,000
Greeley	Land	12,000		
	Buildings	40,000	Total	52,000
Grant	Land	10,000		
	Buildings	33,000	Total	43,000
Hamilton	Land	3,000		
	Buildings	12,000	Total	15,000
Hamilton (old)	Land	500		
	Buildings	200	Total	700
Harrison	Land	9,000		
	Buildings	20,000	Total	29,000
Hawthorne	Land	16,000		
	Buildings	20,000	Total	36,000
High (Central)	Land	90,000		
	Buildings	130,000	Total	220,000
Holland	Land	15,000		
	Buildings	30,000	Total	45,000
Horace Mann	Land	12,500		
	Buildings	30,000	Total	42,500
Humboldt	Land	8,000		
	Buildings	20,000	Total	28,000
Irving	Land	21,000		
	Buildings	20,000	Total	41,000
Jackson	Land	17,500		
	Buildings	1,000	Total	18,500
Jefferson	Land	65,000		
	Buildings	30,000	Total	95,000
Lincoln	Land	60,000		
	Buildings	1,000	Total	61,000
Longfellow	Land	7,000		
	Buildings	30,000	Total	37,000
Lowell	Land	10,500		
	Buildings	30,000	Total	40,500
Lyndale	Land	10,000		
	Buildings	20,000	Total	30,000
Madison	Land	30,000		
	Buildings	45,000	Total	75,000
Marcy	Land	30,000		
	Buildings	10,000	Total	40,000
Minnehaha	Land	3,000		
	Buildings	18,000	Total	21,000
Minnehaha (old)	Land	1,000		
	Buildings	500	Total	1,500
Monroe	Land	18,000		
	Buildings	35,000	Total	53,000
Motley	Land	15,000		
	Buildings	30,000	Total	45,000
North Side High	Land	12,500		
	Buildings	50,000	Total	62,500
Peabody	Land	10,000		
	Buildings	25,000	Total	35,000
Prescott	Land	7,000		
	Buildings	20,000	Total	27,000
Seward	Land	15,000		
	Buildings	36,000	Total	51,000
Sumner	Land	30,000		
	Buildings	20,000	Total	50,000
Tuttle	Land	4,500		
	Buildings	1,500	Total	6,000
Washington	Land	52,000		
	Buildings	60,000	Total	112,000
Webster	Land	18,000		
	Buildings	25,000	Total	43,000
Whittier	Land	33,000		
	Buildings	30,000	Total	63,000
Winthrop	Land	65,000		
	Buildings	20,000	Total	85,000
Old district 89	Land	1,500		1,500
Old district 3	Land	1,000		
	Buildings	200	Total	1,200
Old district 121	Land	3,600		
	Buildings	500	Total	4,100
Vacant land between Thirty-				
eighth St. and Park Ave.	Land	1,200		1,200
Vacant land Marshall St. N.E.	Land	1,000		1,000
Vacant land (just acquired)	Land	12,000		12,000
Total				\$2,000,300

Schedule D.**PARKS, PARKWAYS AND BOULEVARDS.**

Central Park, 33.50 acres or 134 lots at.....	\$7,500 each,	\$1,007,000
Elliot Park, 4 acres or 20 lots at.....	5,500 each,	110,000
Franklin Park, 1.54 acres or 10 lots at.....	5,500 each,	55,000
Hawthorn Park, 1.13 acres or 8 lots at.....	7,500 each,	60,000
Murphy Park, 3.33 acres or 20 lots at.....	2,500 each,	50,000
Moulton Tract, 10 acres or 48 lots at.....	600 each,	28,800
Prospect Park, 20.52 acres or 104 lots at.....	2,000 each,	208,000
Riverside Park, 19.78 acres or 120 lots at.....	1,000 each,	120,000
First Ward Park, 72 lots at.....	1,800 each,	129,600
Oak Lake Park, 10 lots at.....	3,500 each,	35,000
East Side Boulevard, 40 lots at.....	1,500 each,	60,000
Thirty-Fourth St. Boulevard 2 lots at.....	2,000 each,	4,000
Minor Parks, 25 lots at.....	1,500 each,	37,500
Lake of the Isles, 60 acres at.....	6,000 per acre,	360,000
Lovell & Barns Park, 5 acres or 20 lots at.....	2,500 each,	50,000
Washburn Park, 10.08 acres at.....	1,200 per acre,	12,000
Saratoga Springs, 64 acres at.....	1,500 per acre,	96,000
Minnehaha State Park, 173 acres at.....	1,200 per acre,	207,600
Minnehaha Boulevard, 40 acres at.....	500 per acre,	20,000
Central Park Boulevard, 50 feet wide, .35 miles, 13 lots.....	7,500 each,	97,500
Dean Boulevard, 150 feet wide, 1.10 miles, 116 lots.....	1,000 each,	116,000
Hennepin Boulevard, 88 feet wide, 1.33 miles, 106 lots.....	4,400 each,	466,400
Kenwood Boulevard, 100 to 150 feet wide, 1.68 miles, 147 lots.....	2,000 each,	294,000
Stenson Boulevard, 200 feet wide, 1 mile, 140 lots.....	600 each,	84,000
Lyndale Boulevard, 66 feet wide, 1.80 miles, 84 lots (66 feet lots).....	2,500 each,	210,000
Total.....		\$3,918,400

Schedule E.**FIRE DEPARTMENT.**

"A"—2-story brick, 1-story addition.....	\$7,787.68	
Improvements.....	1,517.75	
Lot 10, block 34, town of Minneapolis, part 44 feet on 2nd st. and 117 feet on 3rd ave. north.....	22,000.00	\$31,305.43
"B"—2-story brick.....	\$4,970.00	
Addition to building.....	2,000.00	
Part of lots 1 and 2, block 46, Minneapolis.....	17,800.00	\$24,770.00
"C"—2-story brick, wood addition for stable.....	\$6,000.00	
2-story brick addition, new.....	8,248.67	
Lots 16, 17, 18, 19, 20, 21, block 7, E. D.....	26,400.00	\$40,648.67
"D"—2-story stone.....	\$2,000.00	
Lot 1, block 11, Orth & Hetchman's addition.....	1,200.00	\$3,200.00
"E"—2-story brick.....	\$7,500.00	
Addition to building.....	1,500.00	
Part of lot 8, block 63.....	38,500.00	\$47,500.00
"F"—2-story brick, old.....	\$4,965.00	
Lot "G," sub-division of lots 1 and 2, block 10.....	3,500.00	\$8,465.00
"F"—2-story brick, new.....	\$9,927.84	
Lot 7, blk. 10, Brown's sub-div. of Case & Moore's addition...	5,500.00	\$15,427.84
"G"—2-story brick.....	\$9,039.00	
Improvements.....	1,784.00	
Lot 12, block 14, Atwater's addition.....	8,200.00	\$19,023.00
"H"—2-story brick.....	\$9,063.74	
2-story brick on rear for repair shop.....	2,888.00	
Lot 6, block 19, Snyder & Cole's add., 3rd ave. S. and 12th st..	13,750.00	\$25,701.74
"I"—2-story brick.....	\$9,887.41	
2-story wood, veterinary infirmary.....	1,107.90	
Lot 5, block 1, O. D. & O. R.'s addition.....	5,600.00	\$16,595.31
"J"—2-story brick, 1 story addition 10x16.....	\$9,611.23	
Lot 14, blk. 18, Blaisdell's add., Blaisdell ave. and 28th street..	3,500.00	\$13,111.23
"K"—2-story brick.....	\$8,974.00	
Lot —, block —, Seventh ave. S. E. and Eighth street.....	4,500.00	\$13,474.00
"L"—2-story brick.....	\$7,325.00	
Lot 3, block 7, Oak Lake addition.....	4,500.00	\$11,825.00
"M"—2-story brick.....	\$6,797.65	
Improvements.....	1,087.50	
Lots 14 and 15, block 7, Sibley's addition to St. Anthony, Sum- mer and Jackson street.....	3,500.00	\$11,385.15

"N"—2-story brick.....	\$6,797.65	
Improvements.....	1,087.50	
Lot 16, block 16, Gilpatrick's addition, Seventeenth avenue south, between Twenty-fifth and Twenty-sixth streets.....	1,800.00	\$9,685.15
"O"—2-story brick.....	\$7,598.33	
Improvements.....	1,115.00	
Lot 13, block 2, Willard & Cassidy's add.....	3,000.00	\$11,713.33
"P"—Brick building.....	\$7,998.00	
Improvements.....	973.96	
Lot 7, block 4, East Side add., 24th ave. N. E. and Harrison st.....	1,800.00	\$10,771.96
HEAD QUARTERS FIRE DEPARTMENT—		
Lot 10, block 82, town of Minneapolis.....	\$33,000.00	
Improvements.....	15.84	
Building to be erected on Fourth street, between Hennepin and First avenues No.....		\$33,015.84
NEW LOT—		
Lot 1, block 10, Mabin, White & L.'s addition, Fifth avenue N. and James avenue.....		\$1,400.00
Total.....		\$349,018.65
RECAPITULATION.		
Cost of buildings.....	\$141,987.10	
Cost of improvements.....	7,581.55	
Present value of real estate.....	199,450.00	
Total.....		\$349,018.65

Schedule F,
WATER WORKS.

Street mains, hydrants and valves.....	\$1,669,089.86	
Pump house No. 1, steam plant, intake, wheel pits, etc.....	191,434.57	
Pump house No. 2.....	88,737.86	
Pump house No. 3, pumps, electric plant, intake, } real estate, boilers, etc..... }	208,965.75	
Distribution pipes (west side pump house).....	9,487.02	
Tunnel (west side).....	22,000.00	
Tunnel (east side).....	13,318.00	
Pump No. 1, (west side pump house No. 1).....	13,000.00	
Pump No. 2, " " " ".....	6,000.00	
Pump No. 3, " " " ".....	7,000.00	
Pump No. 4, " " " ".....	7,000.00	
Pump No. 5, " " " ".....	10,000.00	
Pump No. 6, " " " ".....	12,724.51	
Pump No. 7, (east side pump house No. 2).....	12,504.00	
Material on hand, pipe, lead, hydrants, etc.....	18,016.00	
Total.....	\$2,289,277.57	

Schedule G.
MISCELLANEOUS PROPERTY.

PUBLIC LIBRARY—		
For the land.....	\$91,700.00	
Building.....	228,954.01	\$320,654.01
POLICE DEPARTMENT—		
Central Lockup.....	\$27,778.86	
Rear 56x60, lot 7, and part of lot 8, block No. 38, Minneapolis.....	22,000.00	\$49,778.86
Southerly 100 feet, lot 10, block 178, Minneapolis.....	\$5,000.00	
Building (police stable).....	960.00	\$5,960.00
Lot 14, block No. 34, Case and others addition to Minneapolis.....	2,500.00	
Improvements in basement of Scandia Bank for police station.....	4,671.50	
Improvements 5th precinct station, Blaisdell and 28th street.....	1,000.00	
CITY HALL—		\$63,910.36
Building and improvements.....	\$56,121.85	
Lot No. 22, Public square.....	200,000.00	\$256,121.85
QUARANTINE HOSPITAL—		
Buildings and improvements.....	\$2,500.00	
8.78 acres of land, at \$650 per acre.....	5,707.00	\$8,207.00
WORK HOUSE—		
60 acres of land at \$1,250 per acre.....	\$75,000.00	
Buildings and improvements.....	106,189.26	\$181,189.26
NEW CITY HALL—		
*Cost of improvements to date.....	\$250,000.00	
Lots 1, 2, 9, 10, 1/2 of 3 and 8, block 77, town of Minneapolis.....	300,000.00	\$550,000.00

*This item is the amount of the city series of \$750,000 in bonds that have been delivered the court house commissioners.

Schedule H.**MISCELLANEOUS PERSONAL PROPERTY.**

Office fixtures, etc.....	\$10,000.00	
Gas lamps and fixtures.....	10,000.00	
Police signal service.....	5,000.00	
Apparatus fire department.....	139,775.00	
Fire alarm signal service.....	47,135.62	
		\$211,910.62

Schedule I.**RECAPITULATION.**

CITY PROPERTY, VIZ:		\$8,061,161.75
Cedar block pavement.....	\$573,451.36	
Granite block pavement.....	289,492.88	
Boulder block pavement.....	4,756.35	
Curb and gutter.....	373,446.43	
Sewers and sewer tunnels.....	2,446,552.10	
Bridges over Mississippi river.....	1,049,454.15	
Bridges over Bassett's creek.....	72,941.70	
Sundry bridges.....	23,830.66	
Viaducts and bridges over railroad tracks.....	79,511.43	
Police department—real estate and buildings.....	63,910.36	
City hall and site.....	256,121.85	
Quarantine hospital—real estate and buildings.....	8,207.00	
Work house—real estate and buildings.....	181,189.26	
Fire department—real estate and improvements.....	349,018.65	
Water works.....	2,289,277.57	
Library board—building and real estate.....		320,654.01
School board—buildings and real estate.....		2,099,300.00
Park board—parks, parkways and boulevards.....		3,918,400.00
Court house and city hall commission—real estate and improvements.....		550,000.00
		\$14,949,515.76
Miscellaneous personal property.....		211,910.62
		\$15,161,426.38
Total.....		

LEDGER'S**Trial Balances, December 31, 1889.****BOOKS OF CITY OF MINNEAPOLIS, BOARD OF EDUCATION AND LIBRARY BOARD.***City of Minneapolis, Trial Balance, January 1st, 1890.*

	<i>Debit.</i>	<i>Credit.</i>
E. H. Moulton, city treasurer.....	\$354,936.64	
General fund.....		\$134,786.89
Permanent improvement fund.....		74,680.81
Water-works fund.....		67,341.59
Permanent improvement revolving fund.....	44,398.47	
City park fund.....		3,494.36
Sinking fund.....		535,358.74
Board of sinking fund commissioners.....	535,358.74	
1st ward street fund.....		233.90
1st " sidewalk fund.....		54.02
1st " sprinkling ".....	.21	
2nd " street ".....		566.19
2nd " sidewalk ".....		96.11
2nd " sprinkling ".....		848.22
3rd " street ".....		4,332.77
3rd " sidewalk ".....	748.91	
3rd " sprinkling ".....		2,261.62
4th " street ".....	4,157.06	
4th " sidewalk ".....		2,415.09
4th " sprinkling ".....		1,500.76

5th ward street fund.....		3,061.54
5th " sidewalk ".....	718.75	
5th " sprinkling ".....		942.82
6th " street ".....		341.99
6th " sidewalk ".....		2,245.13
6th " sprinkling ".....		512.18
7th " street ".....	156.73	
7th " sidewalk ".....		2,042.13
7th " sprinkling ".....		37.00
8th " street ".....	417.69	
8th " sidewalk ".....		3,517.08
8th " sprinkling ".....		2,261.99
9th " street ".....		1,293.50
9th " sidewalk ".....		1,412.44
9th " sprinkling ".....		336.70
10th " street ".....		305.04
10th " sidewalk ".....		138.88
10th " sprinkling ".....		16.72
11th " street ".....		344.04
11th " sidewalk ".....	593.43	
11th " sprinkling ".....		113.60
12th " street ".....		442.18
12th " sidewalk ".....	97.83	
13th " street ".....		588.18
13th " sidewalk ".....		591.90
Interest fund.....		60,121.48
Warrant account.....		31,590.87
City park board warrant account.....		1,295.91
City bonds.....		5,436,500.00
City park bonds.....		698,000.00
Old school district bonds.....		71,000.00
City of Minneapolis.....		9,451,469.81
Board of education.....	392,000.00	
Board of park commissioners.....	21,550.43	
Board of library commissioners.....	100,000.00	
Hennepin county.....	2,572,133.43	
Tax levy 1879 and previous.....		9,693.00
" 1880.....		1,921.25
" 1881.....		2,670.87
" 1882.....		1,856.43
" 1883.....		7,379.80
" 1884.....		5,149.95
" 1885.....		10,021.06
" 1886.....		22,675.35
" 1887.....		54,228.05
" 1888.....		203,057.14
" 1889.....		2,253,489.44
Bridges over Mississippi river.....	1,049,454.15	
Bridges over Bassett's creek.....	72,941.70	
Board of education property account.....	2,099,300.00	
Parks, parkways and boulevards.....	3,918,400.00	
Sundry bridges.....	23,830.66	
West side pumping station.....	278,646.10	
East side pumping station.....	114,559.86	
Water mains.....	1,669,089.86	
Fire department property account.....	349,018.65	
Granite block pavement.....	289,492.88	
Cedar block pavement.....	573,451.36	
Curb and gutters.....	373,446.43	
Boulder pavement.....	4,756.35	
Sewer system.....	2,446,552.10	
Viaducts and bridges over railroad tracks.....	79,511.43	
Library board property account.....	320,654.01	
North Minneapolis pumping station.....	208,965.75	
City hall, old.....	256,121.85	
Quarantine hospital.....	8,207.00	
Work house property account.....	181,189.26	
Police department property account.....	63,910.36	
City hall, new.....	550,000.00	
Miscellaneous property account.....	211,910.62	
Board of court house and city hall commissioners.....	250,000.00	
New city hall bonds.....		250,000.00
Total.....	\$19,420,678.70	\$19,420,678.70

Board of Education, Trial Balance, December 31, 1889.

	Debit.	Credit.
Everett School.....	\$36,039.98	
Franklin ".....	32,656.11	
Humboldt ".....	21,755.13	
Jefferson ".....	34,649.17	
Lincoln ".....	26,257.31	
Madison ".....	71,119.79	
Morey ".....	25,708.46	
Monroe ".....	39,130.21	

Winthrop School.....	57,125.67	
Webster	30,932.39	
Clay	25,978.47	
Garfield	26,840.17	
Hawthorn	20,435.33	
Douglass	1,199.65	
Tuttle	4,914.19	
Lyndale	25,812.25	
Irving	21,685.70	
Harrison	28,156.68	
Prescott	27,887.11	
Emerson	52,835.81	
Motley	33,657.34	
Lowell	30,225.55	
Holland	24,577.40	
Horace Mann school.....	24,705.23	
Longfellow school.....	31,178.27	
Peabody school.....	35,468.97	
Calhoun	35,330.22	
Bremer	27,125.04	
Seward	40,450.02	
Washington school.....	99,430.65	
High school (Central).....	160,819.66	
Adams school.....	64,132.59	
Summer school.....	30,081.54	
Whittier school.....	19,742.61	
North Side high school.....	71,968.71	
Greeley school.....	50,382.10	
Corcoran	27,675.96	
Baneroff	21.25	
Jackson	15,560.00	
Grant	31,754.20	
Clinton	32,137.48	
Minnehaha school.....	15,777.49	
Hamilton school.....	13,509.80	
Bonds.....		\$31,000.00
Hennepin county.....	567,021.37	
Tax levy 1885.....		3,439.85
" 1884.....		1,045.18
" 1885.....		1,696.80
" 1886.....		4,636.20
" 1887.....		13,754.91
" 1888.....		38,450.48
" 1889.....		503,907.95
R. J. Mendenhall.....	7,028.27	
Real estate.....	49,000.00	
City of Minneapolis.....		392,000.00
School fund.....		29,486.59
Board of education.....		1,043,712.85
Bills payable.....		226,500.00
Furniture.....	87,943.82	
E. H. Moulton, city treasurer.....	29,958.17	
Warrant account.....		471.58
Advance for water mains and sewers.....	4,409.10	
Total.....	\$2,290,192.39	\$2,290,192.39

Library Board, Trial Balance, December 31, 1889.

	<i>Debit.</i>	<i>Cred t.</i>
E. H. Moulton, city treasurer.....	\$11,909.36	
City of Minneapolis.....		\$100,000.00
Library fund.....		11,904.36
Real estate.....	58,867.89	
Warrant account.....		5.00
Hennepin county.....	69,626.91	
Tax levy 1885.....		684.65
Tax levy 1886.....		32.32
Tax levy 1887.....		1,666.74
Tax levy 1888.....		3,692.27
Tax levy 1889.....		63,550.93
Building.....	228,954.01	
Board of library commissioners.....		178,931.82
Books.....	10,094.42	
Furniture.....	6,015.50	
Bills payable.....		25,000.00
Total.....	\$385,468.09	\$385,468.09

TAXES.

STATEMENT IN DETAIL OF LEVY OF 1889, FOR THE EXPENSES OF 1890,
ALSO COMPARATIVE STATEMENT OF TAX LEVIES FOR ELEVEN YEARS.

BOARD OF TAX LEVY.

There is hereby created and constituted in and for the county of Hennepin, a board of tax levy, which shall be composed of the following, to-wit:

Chairman of board of county commissioners.

County auditor.

President of board of education of city of Minneapolis.

President of board of park commissioners.

Chairman of committee on ways and means, city council.

Comptroller of city of Minneapolis.

Mayor of city of Minneapolis.

Which several officers shall be *ex-officio* the members of the said board of tax levy.

Said board shall meet at the office of the county auditor on the second Monday in September, in each year.

Said board shall fix the maximum rate of taxation for the various county and city purposes, and the city council, together with the various boards, may afterwards fix the rate in any sum that shall not exceed the maximum as fixed by the board of tax levy.

COUNTY AUDITOR'S OFFICE, }
Hennepin County, }
MINNEAPOLIS, September 27, 1889. }

To the Honorable City Council:

GENTLEMEN:—I certify that the following resolutions were adopted by the board of tax levy of Hennepin county, at a session of said board held September 24, 1889, to-wit:

First—*Resolved*. That the maximum rate of taxation on each dollar of the valuation of the taxable property of the city of Minneapolis, be fixed at the following rates, for which the city council of said city is authorized to levy taxes for the year 1889, to-wit:

For current expenses, four and eight-tenths (4.8-10) mills.

For interest on bonded debt, two and three-tenths (2.3-10) mills.

For sinking fund, one (1) mill.

For permanent improvement fund, two (2) mills.

Second—*Resolved*. That the following rates be fixed as the maximum rate of taxation on each dollar of the valuation of taxable property in each of the wards as below specified, for which the city council of the city of Minneapolis is authorized to levy taxes for the year 1889, to-wit:

In the First ward, two and five-tenths (2.5-10) mills.

In the Second ward, one and five-tenths (1.5-10) mills.

In the Third ward, two (2) mills.

In the Fourth ward, one (1) mill.

In the Fifth ward, eight-tenths (8-10) of a mill.

In the Sixth ward, two and five-tenths (2.5-10) mills.

In the Seventh ward, two (2) mills.

In the Eighth ward, two and five-tenths (2.5-10) mills.

In the Ninth ward, two (2) mills.

In the Tenth ward, two and five-tenths (2.5-10) mills.

In the Eleventh ward, two (2) mills.

In the Twelfth ward, two and five-tenths (2.5-10) mills.

In the Thirteenth ward, two and five-tenths (2.5-10) mills.

Witness my hand and official seal at Minneapolis, in said county, this 27th day of September, A. D. 1889.

L. A. CONDIT,

[OFFICIAL SEAL.]

County Auditor.

By E. ORTMAN, Deputy.

TAX LEVY OF 1889 FOR 1890.

Resolved, by the city council of the city of Minneapolis, that the following taxes are hereby levied and assessed upon the real and personal property of the city of Minneapolis for the year 1889, to-wit:

General fund.....	\$591,539
Permanent improvement fund.....	257,191
Interest fund.....	270,050
Sinking fund.....	128,595
Total.....	\$1,247,375

Resolved, further, that the following taxes are hereby levied and assessed upon the real and personal property of the several wards of said city, as follows:

1st ward street fund.....	\$8,571	
2nd " " ".....	12,141	
3rd " " ".....	24,373	
4th " " ".....	37,308	
5th " " ".....	14,591	
6th " " ".....	9,202	
7th " " ".....	10,697	
8th " " ".....	24,780	
9th " " ".....	9,171	
10th " " ".....	8,114	
11th " " ".....	8,405	
12th " " ".....	6,812	
13th " " ".....	10,874	
Total.....		\$185,039

Exhibit A

Is a recapitulation of the taxes assessed 1889 for 1890, as shown by the books of the county auditor, January 1, 1890.

Current expenses fund, 4.7-10 mills.....		\$597,378.75
Interest fund, 2.1-10 mills.....		266,913.91
Sinking fund, 1 mill.....		127,101.86
Permanent improvement fund, viz.....		283,411.73
Two mill tax.....	\$254,203.73	
Street opening, special assessments.....	29,208.00	
Library fund, 5-10 mill.....		\$63,550.93
Park fund, viz.....		133,531.53
5-10 mill tax.....	\$63,550.93	
Tree planting, special.....	2,676.00	
Special assessment.....	67,304.60	
Permanent improvement revolving fund, viz.....		\$219,637.76
One-fifth of curb and gutter, special assessment.....	\$39,832.25	
One-fifth of pavement, special assessment.....	78,604.71	
One-fifth of sewer, special assessment.....	101,200.80	
Water mains.....		\$102,825.34
Board of education, 3 mills.....	\$376,896.09	
Board of education, 1 mill.....	127,101.86	
		\$503,997.95

WARD TAX.

Ward.	Street fund.	Sidewalk fund.	Sprinkling fund.	Total
1.....	\$8,453.36	\$25,344.30	\$5,900.74	\$39,698.40
2.....	11,993.68	20,555.44	6,779.62	39,328.74
3.....	24,091.51	34,707.67	12,079.39	70,878.57
4.....	36,983.17	19,685.04	12,740.56	69,408.77
5.....	14,452.34	44,564.53	15,815.34	74,832.21
6.....	9,045.49	19,511.73	5,580.73	34,137.95
7.....	10,486.97	5,824.93	5,159.97	21,471.87
8.....	24,470.35	28,011.05	11,923.83	64,405.23
9.....	9,042.93	21,358.93	3,660.93	34,062.79
10.....	8,044.48	2,506.32	737.50	11,288.30
11.....	8,291.63	17,732.49	8,959.52	34,983.64
12.....	6,919.11	8,830.71	132.32	15,888.14
13.....	10,747.99	1,414.92	141.04	12,303.95
	\$183,023.01	\$250,048.06	\$89,617.49	\$522,688.56
Total city tax for all purposes.....				\$2,821,038.32
State tax, 1.9-10 mills.....			\$241,403.54	
County revenue, 2.3-10 mills.....			202,334.28	
School, 1 mill.....			127,101.86	
				\$660,929.68
Total revenue from special and mill tax.....				\$3,481,968.00

Exhibit B

Shows the valuation upon which the various levies are computed, (which is the valuation as returned by the board of equalization, less the exemptions which are \$100 on each personal assessment, amounting to \$1,493,563;) also the rate, purpose for which tax is levied, the amount for each fund, and the total tax levied on each ward.

<i>Assessed valuation.</i>	<i>Rate, Mills.</i>	<i>Purpose.</i>	<i>Total tax.</i>
\$127,101,861.....	4.7-10.....	General fund.....	\$597,378.75
127,101,861.....	2.....	Permanent imp. fund.....	254,203.72
127,101,861.....	2.1-10.....	Interest fund.....	266,913.91
127,101,861.....	1.....	Sinking fund.....	127,101.86
127,101,861.....	3.....	Board of education.....	381,305.68
127,101,861.....	.5-10.....	Library fund.....	63,550.93
127,101,861.....	.5-10.....	Park fund.....	63,550.93
Total rate.....13.8-10		City tax.....	\$1,754,005.78
\$127,101,861.....	1.9-10.....	State.....	\$241,493.54
127,101,861.....	2.3-10.....	County.....	292,334.28
127,101,861.....	2.....	School.....	254,203.72
Total rate.....6.2-10		Total tax.....	\$788,031.54
<i>Assessed valuation by wards.</i>	<i>Ward.</i>	<i>Rate, Mills.</i>	<i>Total ward tax.</i>
\$4,025,410.....	1.....	2.1-10.....	\$8,453.36
7,995,802.....	2.....	1.5-10.....	11,993.68
12,045,732.....	3.....	2.....	24,091.51
36,983,127.....	4.....	1.....	36,983.17
24,087,197.....	5.....	6-10.....	14,452.34
4,307,374.....	6.....	2.1-10.....	9,045.39
5,243,493.....	7.....	2.....	10,486.97
11,652,552.....	8.....	2.1-10.....	24,470.35
4,521,476.....	9.....	2.....	9,042.93
3,830,725.....	10.....	2.1-10.....	8,044.48
4,145,816.....	11.....	2.....	8,291.63
3,145,047.....	12.....	2.1-10.....	6,919.11
5,118,110.....	13.....	2.1-10.....	10,747.99
\$127,101,861.....	Average rate.....1.4-10		\$183,023.01
<i>Total rate of tax each ward.</i>			<i>Total tax paid by each ward.</i>
1st ward, 22.1-10 mills.....			\$88,961.57
2d " 21.5-10 ".....			171,909.75
3d " 22 ".....			265,006.11
4th " 21 ".....			776,645.18
5th " 20.6-10 ".....			496,196.26
6th " 22.1-10 ".....			95,192.97
7th " 22 ".....			115,356.86
8th " 22.1-10 ".....			257,521.40
9th " 22 ".....			99,472.48
10th " 22.1-10 ".....			84,659.03
11th " 22 ".....			91,207.96
*12th " 22.1-10 ".....			69,505.55
+13th " 22.1-10 ".....			113,424.71

*Except in school district 6 and 8, 19.2-10.

+Except in school district 6 and 8, 19.1-10.

\$2,725,060.33

Exhibit C

Shows the number of mills assessed for different purposes for eleven years beginning with 1879. To ascertain the total levy for any particular year, add to the total of state, county, school and city, the ward tax, and you have the total tax levy for that year—as in 1885, city 14 mills, state, county and school 4.3 mills, Third ward tax 2 mills—total tax in Third ward 1885—20.3-10 mills.

CITY.	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889
	Mills.	Mills.	Mills.	Mills.	Mills.	Mills.	Mills.	Mills.	Mills.	Mills.	Mills.
General fund.....	3.45	4.9	4.3	5.0	5.0	4.3	4.9	5.0	5.5	5.3	4.7
Permanent improvement fund.....			2.5	1.2	2.5	1.6	2.2		2.0	1.5	2.0
Interest fund.....	2.5	2.9	2.7	2.9	2.5	1.8	2.0	2.0	2.2	2.0	2.1
Sinking fund.....	0.45		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Board of education.....	3.0	2.75	4.0	4.0	4.0	3.3	3.2	3.9	3.0	2.3	3.0
Park fund.....					1.0	0.7	0.4	0.5	0.5	0.5	0.5
Library fund.....							0.3	0.5		0.3	
*Total.....	9.40	10.80	14.5	14.1	16.0	12.7	14.0	12.9	14.7	12.9	13.8
State.....	1.5	1.8	1.4	1.1	1.8	1.3	1.8	1.3	1.9	1.7	1.9
County.....	2.0	2.5	2.2	2.0	2.0	1.5	1.5	1.3	1.4	1.4	2.3
School.....	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0
*Total.....	4.5	5.3	4.6	4.1	4.8	3.8	4.3	3.6	5.3	5.1	6.2
First ward.....	1.0	1.5	2.0	1.7	2.5	2.0	2.0	2.5	2.5	2.0	2.1
Second ward.....	0.7	1.0	1.7	1.7	1.5	2.0	2.0	2.0	2.0	1.3	1.5
Third ward.....	1.0	1.0	2.0	1.5	2.5	2.0	2.0	2.5	2.5	2.0	2.0
Fourth ward.....	0.6	0.7	1.7	1.0	1.3	0.7	0.8	0.8	0.8	0.6	1.0
Fifth ward.....	0.5	0.5	1.5	1.5	1.5	1.0	0.8	0.6	0.6	0.5	0.6
Sixth ward.....	1.0	1.5	2.0	1.5	2.1	2.0	2.0	2.5	2.5	2.0	2.1
Seventh ward.....					2.1	2.0	2.0	2.5	2.5	2.0	2.0
Eighth ward.....					2.5	2.0	2.0	2.5	2.5	2.0	2.1
Ninth ward.....									2.5	2.0	2.0
Tenth ward.....									2.5	2.0	2.1
Eleventh ward.....									2.5	2.0	2.0
Twelfth ward.....									2.5	2.0	2.1
Thirteenth ward.....									2.5	0.6	2.1

*Not including ward tax.

Exhibit D

Shows the assessed valuation (after the exemptions have been deducted) of each ward, and the total rate of taxation for each ward. In making comparisons of one year's levy with another, it is only fair that you compare the items which make up the total levy (see table folio 47). In 1886 the average total levy was 17.9 mills, while the preceding year it was 19.6 mills, and the succeeding year it was 21.5. You will observe that in 1886 the levy for permanent improvements was omitted, hence the low levy.

WARDS.	Assessed valuation, 1873.	Rate—Mills.	Assessed valuation, 1880.	Rate—Mills.	Assessed valuation, 1881.	Rate—Mills.	Assessed valuation, 1882.	Rate—Mills.	Assessed valuation, 1883.	Rate—Mills.	Assessed valuation, 1884.	Rate—Mills.
First.....	\$1,322,111	14.9-10	\$1,704,973	17.6-10	\$1,907,612	21.1-10	\$2,569,708	19.0-10	\$3,184,091	22.3-10	\$4,554,301	18.5-10
Second.....	1,071,730	14.6-10	2,282,015	17.1-10	2,957,557	20.8-10	2,065,443	19.0-10	3,657,446	22.3-10	4,800,089	18.5-10
Third.....	940,658	14.3-10	2,072,182	17.0-10	2,531,848	21.1-10	2,970,494	19.7-10	3,954,117	23.3-10	6,367,311	18.5-10
Fourth.....	932,098	14.3-10	10,353,609	16.8-10	12,225,448	20.8-10	10,543,115	19.2-10	13,697,136	22.3-10	26,108,451	17.2-10
Fifth.....	7,128,084	14.4-10	9,320,233	16.9-10	9,813,680	17.0-10	11,361,670	19.7-10	13,642,080	22.3-10	17,001,545	17.3-10
Sixth.....	1,808,052	14.3-10	2,280,063	17.6-10	2,406,331	21.1-10	3,553,844	19.7-10	4,232,065	22.9-10	5,726,543	18.5-10
Seventh.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eighth.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ninth.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenth.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eleventh.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Twelfth.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Thirteenth.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	\$23,415,733	14.5-10	\$28,013,315	16.8-10	\$31,188,486	20.8-10	\$40,702,044	19.5-10	\$53,901,812	22.4-10	\$74,310,711	17.8-10

WARDS.	Assessed valuation, 1885.	Rate—Mills.	Assessed valuation, 1886.	Rate—Mills.	Assessed valuation, 1887.	Rate—Mills.	Assessed valuation, 1888.	Rate—Mills.	Assessed valuation, 1889.	Rate—Mills.
First.....	\$4,607,909	20.3-10	\$5,065,454	19.	\$4,008,340	22.5-10	\$4,028,022	20.	\$4,025,410	22.1-10
Second.....	5,073,801	20.3-10	7,151,687	18.5-10	7,588,441	22.	7,956,887	19.3-10	7,995,802	21.5-10
Third.....	6,097,104	20.3-10	10,073,182	19.	9,531,456	22.5	11,536,882	20.	12,045,732	22.
Fourth.....	27,400,725	19.1-10	32,408,832	17.3-10	33,142,514	20.8-10	37,526,008	18.6-10	36,983,127	21.
Fifth.....	17,51,236	19.1-10	22,200,412	17.1-10	22,857,405	20.6-10	23,803,145	18.5-10	24,087,197	20.6-10
Sixth.....	5,906,129	20.3-10	7,277,349	19.	5,994,828	22.5-10	6,285,139	20.	4,307,374	22.1-10
Seventh.....	3,308,744	20.3-10	4,087,473	19.	4,291,593	22.5-10	5,078,631	20.	5,243,493	22.
Eighth.....	6,216,529	20.3-10	9,726,373	19.	8,803,641	22.5-10	11,454,687	20.	11,652,552	22.1-10
Ninth.....	.....	.....	.....	.....	3,274,307	22.5-10	4,333,717	20.	4,521,476	22.
Tenth.....	.....	.....	.....	.....	2,041,422	22.5-10	3,767,461	20.	3,890,725	22.1-10
Eleventh.....	.....	.....	.....	.....	3,565,064	22.5-10	3,984,711	20.	4,145,816	22.
Twelfth.....	.....	.....	.....	.....	1,949,370	22.5-10	3,192,336	20.	3,145,047	*22.1-10
Thirteenth.....	.....	.....	.....	.....	2,824,778	22.5-10	5,192,206	18.6-10	5,118,110	+22.1-10
Total.....	\$77,468,267	19.6-10	\$89,591,762	17.9-10	\$103,581,566	21.5-10	\$128,139,886	19.2-10	\$127,101,861	21.4-10

*Except lands in school districts 6 and 8, 19.2-10 mills.

+Except lands in school districts 6 and 8, 19.1-10 mills.

Exhibit E

Shows the valuation of city property upon which the tax levy is computed—for eleven years beginning with 1879—also shows the average total rate of taxation on each dollar of assessed valuation. The valuation as shown in this table is the valuation after the exemptions in personal property have been deducted, which is \$100 on each personal assessment.

*Average rate of taxation on
\$1 of assessed valuation.*

Total valuation for 1879.	\$23,415,733.	14.5 Mills.
" " " 1880.	28,013,315.	16.8 "
" " " 1881.	31,188,486.	20.8 "
" " " 1882.	40,702,044.	19.5 "
" " " 1883.	53,901,812.	22.4 "
" " " 1884.	74,310,711.	17.8 "
" " " 1885.	77,468,267.	19.6 "
" " " 1886.	99,591,762.	17.9 "
" " " 1887.	103,581,566.	21.5 "
" " " 1888.	126,139,886.	19.2 "
" " " 1889.	127,101,861.	21.4 "

Exhibit F.

THE FOLLOWING IS A LIST OF DELINQUENT TAXES.

	<i>City.</i>	<i>School.</i>	<i>Library.</i>
Tax levy of 1879 and prior.....	\$9,693.09		
" " " 1880	1,921.25		
" " " 1881	2,670.87		
" " " 1882	1,856.43		
" " " 1883	7,379.80	3,439.85	
" " " 1884	5,140.95	1,045.18	
" " " 1885	10,021.06	1,696.73	684.65
" " " 1886	22,675.35	4,636.20	32.32
" " " 1887	54,228.05	13,754.91	1,666.74
" " " 1888	203,057.14	38,450.48	3,692.27
	\$318,643.99	\$63,023.35	\$6,075.98

RECAPITULATION.

City	\$318,643.99
School board.....	63,023.35
Library.....	6,075.98
Total.....	\$387,743.32

Exhibit G.**STREET LIGHTING**

The Minneapolis Gas Light Co. and the Minnesota Brush Electric Co. contracts expire September 1st, 1892. All other contracts expire April 1st, 1890.

PRESENT NUMBER OF STREET LIGHTS IN USE.

THE SUN VAPOR GAS LIGHT Co.:	NORTH WESTERN GLOBE GAS LIGHT Co.:
100 gasoline lamps at \$22.80 per annum.	*412 gasoline lamps at \$23.00 per annum.
763 gasoline lamps at 20.20 per annum.	492 gasoline lamps at 20.00 per annum.
3 gasoline lamps at 36.00 per annum.	
866	906
WHEELER REFLECTOR Co.:	MINNESOTA BRUSH ELECTRIC Co.
193 kerosene lamps at \$17.95 per annum.	495 electric lights at \$150.00 per annum.
*527 kerosene lamps at 20.95 per annum.	MINNEAPOLIS GAS LIGHT Co.:
	2,854 gas lights at \$15.63 per annum.
720	

*This price includes \$3.00 per year per post additional for rental.

A three year contract, dating April 1, 1890, has been awarded to the North Western Globe Gas Light Co., for 2,000 of their improved lamps; they to furnish everything at \$14.40 per annum, and stand all breakages. This contract is to take the place of the 2,492 kerosene and gasoline lamps now in use.

Under the new contract the city will save \$22,987.90 per annum, besides the breakage, which has amounted to nearly \$2,000 per annum, or \$74,693.70 on the contract.

Providing the city does not increase the gas or electric lighting, the total cost of lighting the city will be \$138,658.02 per annum.

STATEMENT IN DETAIL
OF
ESTIMATES AND APPROPRIATIONS

FOR MAINTAINING THE VARIOUS DEPARTMENTS OF THE CITY OF MINNEAPOLIS FOR THE YEAR ENDING DECEMBER 31, 1890.

Section No. 8, chapter No. 5, city charter: "The city comptroller shall on or before the 10th day of September of each year, report to the city council an estimate of the current expense of the city and several wards thereof for the fiscal year, commencing (as amended) on the 1st day of January, next ensuing, together with a statement of the amount of all revenues received by the city for the year ending on the 1st day of September from other sources than taxation."

ESTIMATES FOR THE YEAR 1890.

FIRE DEPARTMENT.

Salaries of 233 employees.....	\$227,260.00	
Expense of fuel and lights.....	9,917.26	
Repairs to apparatus and buildings.....	7,956.15	
Expense of horses.....	15,059.59	
Store room supplies.....	5,000.00	
General running expenses.....	5,800.00	
Estimate for twelve months.....	\$270,993.00	
Estimate for ten months.....		\$225,827.50
Fire alarm telegraph.....	17,524.00	
Two steam fire engines.....	10,000.00	
Two hose carriages.....	1,600.00	
One water tower.....	5,000.00	
Sixteen horses and harness.....	4,720.00	
Eight thousand feet hose.....	8,000.00	
		\$46,844.00
		\$272,671.50

POLICE DEPARTMENT.

One superintendent police, \$3,500 per annum.....	\$3,500.00	
Five inspectors, \$1,200 per annum.....	6,000.00	
Five captains, \$1,200 per annum.....	6,000.00	
Four lieutenants, \$1,100 per annum.....	4,400.00	
Thirteen sergeants, \$1,000 per annum.....	13,000.00	
One sergeant, mounted, \$1,260 per annum.....	1,260.00	
Four court officers, \$900 per annum.....	3,600.00	
Six jailors, \$900 per annum.....	5,400.00	
Six drivers, \$900 per annum.....	5,000.00	
One hundred and one patrolmen, \$900 per annum.....	90,900.00	
Thirty-six patrolmen, \$840 per annum.....	30,240.00	
Fifteen patrolmen, mounted, \$1,160 per annum.....	17,400.00	
Twenty patrolmen, new, \$780 per annum.....	15,600.00	
Clerks, telegraph operators, surgeons, janitors, etc.....	7,032.00	
Estimate for twelve months.....	\$209,732.00	
Estimate for ten months.....		\$174,776.67
One new patrol wagon and team.....	\$1,550.00	
New patrol boxes.....	18,000.00	
Miscellaneous expenses.....	20,000.00	
Furnishing three new stations.....	3,000.00	
		\$42,550.00
		\$217,326.67

STREET LIGHTING.

475 electric lights, \$150 per annum	\$71,250.00	
3,050 gas lights, \$15.63 per annum	47,671.50	
500 gas lights, 15.63 " " 5 months	3,256.25	
*400 globe lights, 20.00 " " 3 "	2,500.00	
*406 globe lights, 23.00 " " 2 "	2,234.50	
*100 sun vapor lights, \$22.80 per annum, 3 months	570.00	
*200 " " " 20.30 " " 3 "	1,015.00	
*566 " " " 23.30 " " 3 "	3,296.98	
*197 Wheeler reflector, 17.90 " " 3 "	881.57	
*523 " " " 20.90 " " 3 "	2,732.67	
2500 artificial lights, 15.00 " " 9 "	28,125.00	
Incidentals	6,466.53	
Estimate for 12 months	\$170,000.00	
Estimate for 10 months		\$141,666.67

*The 2,500 lights at \$15.00 are to take the place of these lights when the contracts expire.

SALARIES OF CITY OFFICIALS.

Mayor, \$2,000 per annum	\$2,000.00	
Mayor's secretary, \$600 per annum	600.00	
Thirty-nine aldermen, \$720 per annum	28,080.00	
City attorney, \$4,500 per annum	4,500.00	
Two assistant city attorneys, \$1,500 per annum	3,000.00	
Stenographer for city attorney, \$780 per annum	780.00	
City comptroller, \$3,100 per annum	3,100.00	
Deputy city comptroller, \$1,200 per annum	1,200.00	
City clerk, \$3,100. per annum	3,100.00	
Clerk, \$1,000 per annum	1,000.00	
Assistant city clerk, \$1,000 per annum	1,000.00	
Clerk, \$780 per annum	780.00	
Clerk, \$840 per annum	840.00	
City treasurer, \$1,200 per annum	1,200.00	
Clerk, city treasurer, \$1,200 per annum	1,200.00	
Bookkeeper, city treasurer, \$800 per annum	800.00	
City physician, \$1,500 per annum	1,500.00	
Assistant city physician, \$900 per annum	900.00	
Thirteen street commissioners, \$900 per annum	11,700.00	
Meat inspector, \$1,400 per annum	1,400.00	
Assistant meat inspector, \$1,200 per annum	1,200.00	
Sealer of weights and measures, \$200 per annum	200.00	
Attendant city hall scales, \$720 per annum	720.00	
Light inspector	1,166.00	
Estimate for 12 months	\$71,966.00	
Estimate for 10 months		\$59,971.67

CITY ENGINEER'S DEPARTMENT.

Salaries	\$40,000.00	
Special tax expenses	2,500.00	
Stationery and supplies	900.00	
Blank books, blanks, etc.	800.00	
Instruments and repairs	300.00	
Maps and plats	200.00	
Livery	200.00	
Postage	100.00	
Estimate for twelve months	\$45,000.00	
Estimate for ten months		\$37,500.00

STREET OPENING EXPENSES.

Expense of commissioners in opening streets	\$3,600.00	
Estimate for twelve months	\$3,600.00	
Estimate for ten months		\$3,000.00

WORK HOUSE DEPARTMENT.

Salaries	\$1,000.00	
Clothing and bedding	3,000.00	
Provisions	4,500.00	
Horse feed	750.00	
Fuel and lights	2,500.00	
Medical expense	200.00	
Incidentals	1,000.00	
Estimate for twelve months	\$20,950.00	
Estimate for ten months		\$17,458.34

CITY OF MINNEAPOLIS.

HEALTH DEPARTMENT.

Salaries.....	\$15,000.00	
Scavenger service.....	2,000.00	
Printing, stationery and incidentals.....	1,000.00	
Fuel and repairs at crematory.....	2,000.00	
Rent and repairs of dumps.....	2,000.00	
Disinfecting for poor people.....	1,000.00	
Quarantine hospital (including salaries, lights, fuel, food and medical services).....	2,000.00	
Estimate for twelve months.....	\$25,000.00	
Estimate for ten months.....		\$20,833.34

CITY HOSPITAL EXPENSE.

Salaries.....	\$3,300.00	
Fuel.....	1,100.00	
Lights.....	550.00	
Rent.....	960.00	
Provisions.....	4,500.00	
Dry goods.....	600.00	
Drugs and surgical appliances.....	1,300.00	
Incidentals.....	600.00	
Repairs, etc.....	1,000.00	
Estimate for twelve months.....	\$13,910.00	
Estimate for ten months.....		\$11,591.67

POOR DEPARTMENT.

Groceries.....	\$12,000.00	
Fuel.....	5,000.00	
County farm.....	7,500.00	
Burials.....	2,700.00	
Transportation.....	2,600.00	
Bethany Home.....	4,000.00	
Private hospitals.....	3,000.00	
Special bill voted by supervisors of poor.....	2,000.00	
Medicine.....	200.00	
Incidentals.....	500.00	
Stationery.....	100.00	
Salary of superintendent of poor.....	1,500.00	
Salary of clerk of superintendent of poor.....	900.00	
Estimate for twelve months.....	\$42,000.00	
Estimate for ten months.....		\$35,000.00

MUNICIPAL COURT.

Salaries.....	\$11,480.00	
Labor and repairs.....	500.00	
Printing and stationery.....	600.00	
Rent.....	1,500.00	
Fuel and lights.....	250.00	
Furniture, etc.....	200.00	
Incidentals.....	500.00	
Estimate for twelve months.....	\$15,030.00	
Estimate for ten months.....		\$12,525.00

ASSESSOR'S DEPARTMENT.

Assessor's salary.....	\$2,000.00	
Fourteen deputy assessors.....	4,000.00	
Two clerks.....	1,700.00	
One engineer.....	300.00	
Printing and books.....	550.00	
Supplies, stationery and postage.....	100.00	
Sundry expenses.....	600.00	
Board of equalization.....	1,000.00	
Clerk board of equalization.....	250.00	
Estimate for twelve months.....	\$10,500.00	
Estimate for ten months.....		\$8,750.00

BUILDING INSPECTOR'S DEPARTMENT.

Salary of inspector.....	\$2,000.00	
Salary of clerk.....	600.00	
Salary of assistant inspectors.....	5,500.00	
Maps, books, etc.....	400.00	
Incidentals.....	500.00	
Estimate for twelve months.....	\$9,000.00	
Estimate for ten months.....		\$7,500.00

CITY HALL EXPENSE.

Janitor.....	\$1,300.00	
Elevator attendant.....	720.00	
Engineer.....	1,000.00	
Assistant engineer.....	800.00	
Fuel.....	4,500.00	
Repairs and supplies.....	2,000.00	
Fireman, nine months at \$50.....	450.00	
Estimate for twelve months.....	\$10,770.00	
Estimate for ten months.....		\$8,975.00
Incidentals.....	\$6,000.00	
\$500 per month for ten months.....		\$5,000.00
Election expenses, fall of 1890.....		\$22,500.00
Contingent fund for 1890.....		\$10,000.00

STATIONERY AND PRINTING.

Publishing council proceedings.....	\$8,500.00	
Incidentals.....	500.00	
Estimate for twelve months.....	\$9,000.00	
Estimate for ten months.....		\$7,500.00

POUNDS.

Eight poundmasters, \$500 per annum.....	\$4,000.00	
Incidentals.....	200.00	
Estimate for twelve months.....	\$4,200.00	
Estimate for ten months.....		\$3,500.00

ROADS AND BRIDGES.

Five bridge watchmen, \$500 per annum.....	\$2,500.00	
One bridge watchman, \$600 per annum.....	\$600.00	
Labor and repairs.....	2,900.00	
Estimate for twelve months.....	\$6,000.00	
Estimate for ten months.....		\$5,000.00

RECAPITULATION OF ESTIMATES.

	<i>Twelve months.</i>	<i>Ten months.</i>
Fire department.....	\$317,837.00	\$272,671.50
Police department.....	252,232.00	217,276.67
Lighting streets.....	170,000.00	141,666.67
Salaries of city officials.....	71,966.00	59,971.67
City engineer's department.....	45,000.00	37,500.00
Street opening expense.....	3,600.00	3,000.00
Workhouse department.....	20,950.00	17,458.34
Health department.....	25,000.00	20,833.34
City hospital expense.....	13,910.00	11,591.67
Poor department.....	42,000.00	35,000.00
Municipal court.....	15,030.00	12,525.00
Assessor's department.....	10,500.00	8,750.00
Building inspector's department.....	9,000.00	7,500.00
City hall expense.....	10,770.00	8,975.00
Incidentals.....	6,000.00	5,000.00
Election expenses, fall 1890.....	22,500.00	22,500.00
Contingent fund.....	10,000.00	10,000.00
Stationery and printing.....	9,000.00	7,500.00
Pounds.....	4,200.00	3,500.00
Roads and bridges.....	6,000.00	5,000.00
Total estimates.....	\$1,065,495.00	\$908,219.86
Total estimates on account of the general fund for 10 months of the fiscal year ending January 1st, 1891.....		908,219.86
Estimated deficiency, March 1, 1890.....		65,000.00
		\$973,219.86

REVENUE ACCOUNT—GENERAL FUND.

Receipts from all sources other than taxes for the year ending August 31st, 1889:		
Licenses.....	\$274,673.75	
Municipal court.....	27,498.69	
Rents.....	3,580.04	
Miscellaneous.....	23,937.78	
Amount to be provided for by taxation, assuming that the receipts from sources other than taxation will be at least as much as that for year ending August 31st, 1889.....		\$329,690.26
		\$643,529.60

APPROPRIATIONS FOR 1890.

MINNEAPOLIS, October 4, 1889.

To the Honorable City Council:

GENTLEMEN—The undersigned, your standing committee on ways and means, to whom was referred the communication of the city comptroller, submitting estimates for the various departments on account of the general fund, respectfully report that they have given the question a careful and thorough investigation, and recommend the passage of the following resolution, fixing the maximum to be expended in the various departments on account of the general fund, for the fiscal year ending January 1, 1891. We have carefully considered the demands and the necessities of the various departments and the reductions we have made will not impair the efficiency of any of the departments; and we further recommend that the expenditures of the various departments be so regulated as to cover the entire time intended to be covered by the appropriation, and to give such service as shall be commensurate with the demands of the departments, and at the same time keep within their appropriations.

Respectfully submitted,

EMERSON COLE,

C. P. LOVELL,

F. C. BARROWS,

VINCENT REEVES,

Committee.

Section 10, chapter 5, city charter: "Prior to its levying such tax to defray the current expenses of the city for the next fiscal year, said city council shall by resolution, appropriate a certain sum of money for the expenses of said department of the city government, which is to be paid out of said current expense fund, and no more money than thus appropriated shall be expended for any fiscal year for any such department of the city government."

Resolved by the City Council of the City of Minneapolis; That the maximum to be expended for the several purposes named below on account of the general fund for the fiscal year ending January 1, 1891, be fixed at the following amounts:

Fire department salaries.....	\$173,334	
Fire department general expense.....	40,000	
		\$213,334
Police department salaries.....	\$158,334	
Police department general expense.....	12,500	
		170,834
Street lighting.....		141,667
Salaries of city officials.....		59,972
Engineer's department.....		35,417
Street opening expense.....		2,500
Work house.....		16,667
Health department.....		16,667
City hospital.....		10,000
Poor department.....		33,334
Municipal court.....		12,525
Assessor's department.....		8,750
Building inspector's department.....		6,667
City hall expense.....		8,975
Incidentals.....		5,000
Election expenses, fall of 1890.....		22,500
Contingent fund.....		10,000
Stationery and printing.....		7,500
Pounds.....		3,500
Roads and bridges.....		5,000
Total.....		\$790,809
Fire department improvement, viz.....		29,320
Two new fire engines.....	\$10,000	
Two new hose carts.....	1,600	
Water tower truck.....	5,000	
Sixteen horses.....	4,720	
Eight thousand feet hose.....	8,000	
Police department improvement, viz.....		18,000
New patrol boxes.....	\$15,000	
Furnishing new stations.....	2,000	
Patrol wagon and horses.....	1,000	
Total.....		\$838,129

Bonded Debt of the City of Minneapolis—Continued.

DATE.	Issued for—	Numbers.	Each bond.	Time, y'rs.	Rate of interest.	When due.	Total.
Feb. 1, 1871	Water works	1- 110	500	20	8	Feb. 1, 1891	\$55,000
Feb. 2, 1874	" "	151- 270	500	25	8	Feb. 2, 1899	60,000
July 1, 1872	" "	111- 150	1,000	30	7	July 1, 1902	40,000
July 1, 1870	" "	1- 50	500	30	8	July 1, 1900	25,000
April 1, 1882	" "	604- 728	1,000	20	4½	April 1, 1902	125,000
July 2, 1883	" "	1,104-1,382	1,000	30	4½	April 1, 1912	280,000
May 1, 1885	" "	1,604-1,633	1,000	30	4½	July 2, 1913	30,000
July 15, 1886	" "	2,154-2,273	1,000	30	4	May 1, 1915	120,000
April 1, 1887	" "	3,209-3,538	1,000	30	4	July 15, 1916	330,000
Aug. 1, 1888	" "	3,739-3,908	1,000	30	4	April 1, 1917	170,000
						Aug. 1, 1918	
							\$1,235,000
April 1, 1887	Permanent imp. rev. fund	3,009-3,158	1,000	30	4	April 1, 1917	\$150,000
Aug. 1, 1888	" " " "	3,909-4,063	1,000	30	4	Aug. 1, 1918	155,000
Dec. 15, 1888	" " " "	4,154-4,203	1,000	30	4	Dec. 15, 1918	50,000
Feb. 1, 1889	" " " "	4,204-4,303	1,000	30	4	Feb. 1, 1919	100,000
May 15, 1889	" " " "	4,754-4,803	1,000	30	4	May 15, 1919	50,000
							\$505,000
July 1, 1872	Falls improvement.....	121- 169	500	18	8	July 1, 1890	\$24,500
Mar. 1, 1884	Viaducts and R. R. Cros'g	1,504-1,555	1,000	30	4½	Mar. 15, 1914	52,000
Mar. 15, 1884	" " " "	1,556-1,603	1,000	30	4½	Mar. 15, 1914	48,000
July 1, 1872	General purposes imp....	1- 20	1,000	30	7	July 1, 1902	20,000
							\$144,500
Dec. 2, 1872	Bridges over Mississippi.	1- 250	1,000	20	8	Dec. 2, 1892	\$250,000
Feb. 2, 1874	" " " "	251- 270	1,000	20	8	Feb. 2, 1894	20,000
May 1, 1875	" " " "	271- 320	1,000	30	8	May 1, 1905	50,000
Feb. 15, 1887	" " " "	2,349-2,738	1,000	30	4	Feb. 15, 1917	390,000
July 1, 1885	" " " "	1,984-2,093	1,000	30	4	July 1, 1915	110,000
April 1, 1882	" " " "	729- 804	1,000	20	4	April 1, 1902	76,000
Mar. 15, 1889	" " " "	4,304-4,333	1,000	30	4½	Mar. 15, 1919	30,000
							\$926,000
July 1, 1871	Sewers	1- 25	1,000	25	7	July 1, 1896	\$25,000
July 1, 1872	" "	26- 50	1,000	30	7	July 1, 1902	25,000
July 1, 1870	" "	51- 80	500	30	8	July 1, 1900	15,000
July 1, 1881	" " main sewers.....	514- 563	1,000	25	4½	July 1, 1906	50,000
Aug. 1, 1888	" "	4,064-4,153	1,000	30	4	Aug. 1, 1918	90,000
							\$205,000
July 1, 1881	Permanent improvem'ts.	564- 603	1,000	27	4½	July 1, 1908	40,000
April 1, 1882	" " " "	805- 969	1,000	20	4½	April 1, 1902	165,000
April 2, 1883	" " " "	970-1,103	1,000	30	4½	April 1, 1912	134,000
July 2, 1883	" " " "	1,384-1,428	1,000	30	4½	April 2, 1913	45,000
Mar. 15, 1884	" " " "	1,429-1,503	1,000	30	4½	July 2, 1913	75,000
May 1, 1885	" " " "	1,634-1,903	1,000	30	4½	Mar. 15, 1914	270,000
July 15, 1886	" " " "	2,274-2,308	1,000	30	4½	May 1, 1915	35,000
April 1, 1887	" " " "	2,739-3,008	1,000	30	4	July 15, 1916	270,000
April 1, 1887	" " " "	3,159-3,208	1,000	30	4	April 1, 1917	50,000
Aug. 15, 1887	" " " "	3,539-3,638	1,000	30	4	Aug. 1, 1917	100,000
Dec. 1, 1887	" " " "	3,689-3,738	1,000	30	4	Dec. 15, 1917	50,000
Mar. 15, 1889	" " " "	4,334-4,503	1,000	30	4	April 1, 1917	170,000
May 15, 1889	" " " "	4,629-4,753	1,000	30	4	Mar. 15, 1919	125,000
June 20, 1889	" " " "	4,804-4,903	1,000	30	4	May 15, 1919	100,000
						June 20, 1919	
							\$1,629,000
Sept. 1, 1887	Ry. Aid, M. & St. L. Ry. Co	251- 281	1,000	20	7	Sept. 1, 1897	31,000
Nov. 15, 1877	" " " "	282- 350	1,000	20	7	Nov. 15, 1897	94,000
Nov. 1, 1871	" " " "	351- 400	500	30	7	Nov. 1, 1901	125,000
		1- 250	500	30	7		
							\$250,000

Exhibit I.

Recapitulation of the bonded indebtedness of the city of Minneapolis, January 1, 1890, showing the aggregate sum issued for different purposes:

School bonds.....	\$494,000
Park bonds.....	698,000
City hall and court house bonds.....	300,000
Library fund.....	100,000
Water works.....	1,235,000
Permanent improvement revolving fund.....	505,000
Falls improvement.....	24,500
Viaducts and railroad crossings.....	100,000
General purposes improvement.....	20,000
Bridges over the Mississippi.....	926,000
Sewers.....	205,000
Permanent improvements.....	1,629,000
Railway aid Minneapolis & St. Louis railway company.....	250,000
	<hr/>
	\$6,486,500

Exhibit J.

Recapitulation of the bonded indebtedness of the city of Minneapolis, January 1, 1890, showing the aggregate amount maturing each year:

Amount of bonds that mature in 1890.....	\$26,000
" " " 1891.....	70,000
" " " 1892.....	335,500
" " " 1893.....	22,000
" " " 1894.....	70,000
" " " 1896.....	25,000
" " " 1897.....	125,000
" " " 1899.....	100,000
" " " 1900.....	40,000
" " " 1901.....	125,000
" " " 1902.....	85,000
" " " 1902 or 1912.....	366,000
" " " 1905.....	50,000
" " " 1906.....	50,000
" " " 1908.....	40,000
" " " 1913.....	659,000
" " " 1914.....	498,000
" " " 1915.....	550,000
" " " 1916.....	195,000
" " " 1917.....	1,640,000
" " " 1918.....	465,000
" " " 1919.....	950,000
	<hr/>
	\$6,486,500

Exhibit K.

Recapitulation of the bonded debt of the city of Minneapolis January 1st, 1890, showing the total amount issued at the different rates of interest, and the average rate of interest on the total bonded debt.

\$3,190,000 of the bonded debt draws int. at 4 per cent., payable semi-annually.	
2,223,000 " " " 4½ " " " "	
85,500 " " " 5 " " " "	
3,000 " " " 5½ " " " "	
40,000 " " " 6 " " " "	
363,000 " " " 7 " " " "	
570,000 " " " 8 " " " "	
12,000 " " " 10 " " " "	
<hr/>	
\$6,486,500	

Average rate of interest, 4.73 per cent.

Exhibit L.

The following statement shows the per cent. of increase in the bonded debt and the assessed valuation for eleven years beginning with 1879:

	Per cent.		Per cent.
1879, bonded debt, increase.....	3.6-10.	Assessed valuation, increase.....	19.3- 5
1880, " " " ".....	" " "	" " " ".....	11.3-10
1881, " " " ".....	4.1-10.	" " " ".....	4
1882, " " " ".....	29.1-10.	" " " ".....	25.2- 5
1883, " " " ".....	25.7-10.	" " " ".....	32.2- 5
1884, " " " ".....	27.5-10.	" " " ".....	37.4- 5
1885, " " " ".....	24.1-10.	" " " ".....	4.1- 5
1886, " " " ".....	23.3-10.	" " " ".....	28.1- 2
1887, " " " ".....	23.	" " " ".....	8.3-10
1888, " " " ".....	14.1- 2.	" " " ".....	16.9-10
1889, " " " ".....	17.1- 5.	" " " ".....	7-10 of 1

Exhibit M

Shows in detail the date, amount, rate, time, the purpose for which issued, the price paid, by whom purchased, and the average premium paid on all bonds issued and sold during the year 1889.

1889.	Am't of issue.	Rate.	Time, yr's.	Issued for.	Price paid for each \$1,000 bond	By whom purchased.
Feb. 1	\$100,000	4	30	Revolving fund,	\$985.26	Municip'l Investm't Co., Chicago, Ill.
Mch. 15	30,000	4	30	Franklin av. bridge,	993.16	R. L. Day & Co., Boston, Mass.
Mch. 15	170,000	4	30	Permanent imp.fund	993.16	R. L. Day & Co., Boston, Mass.
May 1	100,000	4	30	Park fund,	1,010.22.89	Coffin & Stanton, New York.
May 15	125,000	4	30	B'rd education fund	1,013.97	Brewster, Cobb & Eastabrook, Bost'n
May 15	125,000	4	30	Permanent imp.fund	1,013.97	" " " "
May 15	50,000	4	30	Revolving fund,	1,013.97	" " " "
Jun. 20	100,000	4	30	Permanent imp.fund	1,026.39	" " " "
Oct. 15	75,000	4	30	B'rd education fund	1,023.75	Blake Bros. & Co., Boston, Mass.
Nov. 1	75,000	4	30	*Park fund,	1,026.25	Blake Bros. & Co., Boston, Mass.
Total..	\$950,000					

Average premium on year's sale, 92-100 of 1 per cent.

Issue of February 1, selling at discount, 1 474-1000 per cent.

Issue of June 20, selling at premium, 2,639-1000 per cent.

*Only \$41,000 sold. Balance held by park board as collateral for temporary loan.

SINKING FUND.

RECEIPTS AND DISBURSEMENTS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1889.

HOW CREATED.

A tax of one mill shall be levied upon the assessed valuation of the city for the purpose of creating a fund for the redemption of the bonds or debt of the city as they become due.

Tax levied 1889 for 1890..... \$127,101.86

SINKING FUND.

Provided by an act of the legislature of the state of Minnesota for the redemption of the bonds or debt of the city of Minneapolis. Chapter 5, section 13 and 14 city charter.

SECTION 13. The city council shall also at the same time levy upon all the taxable property in said city, such taxes as shall be sufficient to pay the interest to become due during such next fiscal year upon all the bonds or debt of said city, and an additional tax of one mill on a dollar of the assessed valuation of all such taxable property, to provide for the principal of said bonds or debt when the same shall have become due, and the amounts collected pursuant to this section shall not be applied to any other purpose than herein named; but this restriction shall not prohibit the investment of the sinking fund hereinafter provided for.

SEC. 14. In order to provide for the certain payment of the bonds and debts of the city, the city council is authorized to maintain the sinking fund already established, and to provide by ordinance for the care, investment and security thereof, and from time to time to amend such ordinances in such manner as may be necessary or expedient, but shall have no authority to abolish such sinking fund until all the debts of the city are fully paid, nor shall it divert said fund or any revenue or increase thereof to any other purpose.

The substantial maintenance of the provisions of this and the preceding section, for the payment of the principal and interest of the bonds or debt of said city, is hereby declared to be part of the contract with the holder of any bonds of the city that may hereafter be issued and shall be kept inviolate.

An Act of the Legislature of the State of Minnesota Creating a Board of Sinking Fund Commissioners.

SECTION 1. That the mayor, comptroller and treasurer of the city of Minneapolis, and their successors in office, be and hereby are appointed a board of sinking fund commissioners, for the purpose of taking charge of, controlling and directing the investment and disbursement of the sinking funds appropriated, or hereafter to be appropriated, to the extinguishment of the debt of said city or either of the divisions thereof.

BOARD OF SINKING FUND COMMISSIONERS.

E. C. BABB, *Chairman.*

EDER H. MOULTON, *Treasurer.*

JOHN F. CALDERWOOD, *Secretary.*

SINKING FUND.

Receipts.

Jan. 1, 1889.	By balance in the hands of the treasurer, E. H. Moulton.....		\$425,823.01
June 12, 1889.	By coupons paid on city bonds in sinking fund.....	\$8,787.50	
Dec. 11, 1889.	By coupons paid on city bonds in sinking fund.....	8,787.50	
June 22, 1889.	By 1 mill tax collected March settlement of taxes....	23,236.19	
June 22, 1889.	By 1 mill tax collected June settlement of taxes....	93,561.67	
Dec. 11, 1889.	By 1 mill tax collected November settlement of taxes	3,162.87	
Total receipts.....			\$137,535.73
Total.....			\$563,358.74

Disbursements.

May 1, 1889.	To paid fire department bonds, issued May 1, 1874, 25 years, 8 per cent., \$500 each, Nos. 41-64.....	\$12,000.00
July 1, 1889.	To paid Falls Imp. bonds, issued July 1, 1872, 27 years, 8 per cent., \$500 each, Nos. 170-199.....	15,000.00
Oct. 15, 1889.	To paid school district No. 119, bonds Nos. 9-10, 8 per cent., \$500 each.....	1,000.00
Total disbursements.....		\$28,000.00
Jan. 1, 1890.	Balance in the hands of E. H. Moulton, treasurer of sinking fund commissioners.....	\$535,358.74

Exhibit N.

SECURITIES IN THE SINKING FUND.

BONDS OF THE CITY OF MINNEAPOLIS—

Nos. 1,535 to 1,555 inclusive, 4½ per cent interest.....	\$21,000.00
Nos. 491 to 512 " 5 " " ".....	22,000.00
Nos. 1,504 to 1,534 " 4½ " " ".....	31,000.00
Nos. 1,556 to 1,603 " 4½ " " ".....	48,000.00
Nos. 1,174 to 1,208 " 4½ " " ".....	35,000.00
Nos. 1,984 to 2,043 " 4 " " ".....	60,000.00
Nos. 3,539 to 3,638 " 4 " " ".....	100,000.00
Nos. 4,054 to 4,153 " 4 " " ".....	100,000.00

Total bonds.....	\$417,000.00
Security bank certificate of deposit No. 69,222, dated September 17, 1888; interest at 5 per cent per annum.....	\$5,342.90
Security bank certificate of deposit No. 71,220, dated December 27, 1888; interest at 5 per cent per annum.....	3,480.11
Security bank certificate of deposit No. 75,449, dated July 29, 1889; interest at 4 per cent per annum.....	30,000.00
Security bank certificate of deposit No. 78,124, dated December 12, 1889; interest at 4 per cent per annum.....	10,950.37
City bank certificate of deposit No. 10,311, dated July 29, 1889; interest at 5 per cent per annum.....	29,797.86
First National bank certificate of deposit No. 147,874, dated July 29, 1889; interest at 4 per cent per annum.....	\$38,787.50
Total.....	\$118,358.74
	\$535,358.74

LIBRARY FUND.

RECEIPTS AND DISBURSEMENTS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1889.

HOW CREATED.

A tax not to exceed 5-10 of 1 mill shall be levied upon all the taxable property of the city, sufficient to maintain and govern the public library of the city for the next fiscal year.

Tax levied 1889 for 1890, 5-10 of 1 mill..... \$63,550.93

LIBRARY FUND.

Receipts.

SUBSCRIPTIONS—

R. C. Benton.....	\$100.00	
George H. Rust.....	250.00	
Samuel C. Gale.....	500.00	
T. B. Casey.....	125.00	
J. E. Bell.....	250.00	
A. R. Graves.....	10.00	
C. McC. Reeve, treasurer Athenæum.....	8,000.00	
Gale & Co.....	250.00	
Chas. J. Martin.....	250.00	
W. H. Dunwoody, in full.....	375.00	
M. B. Koon.....	250.00	
F. H. Peavy.....	375.00	
John F. Peterson.....	25.00	
T. B. Walker.....	3,750.00	
C. G. Goodrich.....	3,750.00	
Clinton Morrison.....	3,750.00	
T. B. Casey.....	125.00	
C. A. Pillsbury & Co.....	2,500.00	
L. F. Menage.....	125.00	
Estate of H. O. Hamlin.....	500.00	
R. B. Langdon.....	1,000.00	
E. M. Johnson.....	250.00	
Howe Paige.....	25.00	
F. G. Corser.....	10.00	
W. H. Eustis.....	500.00	
A. R. Hall.....	50.00	
Total.....		\$27,095.00

TAXES—

Collected on account levy of 1885 by county treasurer.....	\$61.79	
" " " 1886 " " ".....	437.09	
" " " 1887 " " ".....	2,523.44	
" " " 1888 " " ".....	34,149.65	
Total.....		\$37,171.97

INTEREST AND PENALTIES—

Interest allowed in settlement with county treasurer.....	\$118.76	
Penalties " " " " ".....	733.33	
Total.....		\$852.00

SUNDRIES—

Insurance premiums returned by E. M. Johnson.....	\$12.75	
" " " J. Thompson, Jr.....	10.00	
Loan from the Farmers' & Mechanics' bank, advance on June settlement of taxes.....	25,000.00	
Total.....		\$25,022.75
Total receipts.....		\$90,141.81

*Disbursements.***BUILDING ACCOUNT—**

O. T. Erickson, superintendent of construction.....	\$910.00
Winslow Bros. & Co., contract stairs, etc.....	9,900.00
H. Chalker, contract stone work.....	2,500.00
H. E. Selden, contract wood work.....	29,500.00
F. S. Martin, contract heating appartaus.....	10,500.00
Roman A. Dabrowski, wood work.....	14,750.00
A. S. Huey, electric light.....	700.00
E. C. Cauvet, plumbing.....	1,600.00
W. H. Norris, plastering.....	2,925.00
The Pioneer Fire Proof Construction Co., roofing.....	5,450.00
Johnson Electric Service Co.....	1,800.00
Stahl & Wirtz, covering pipe.....	135.64
Hugh Ketcham & Co., iron works.....	8,000.00
Hugh Ketcham & Co., iron work bookcases.....	6,814.00
Jacob Fjelde, statue.....	1,000.00
Crane Elevator Co., elevator.....	1,425.00
James Sacre, grading.....	279.54
Minneapolis Gas Light Co., fixtures.....	49.20
J. M. Locke, painting.....	934.33
Asbestine Stone Sidewalk Co.....	2,618.35
Franklin Benner, lighting fixtures.....	3,000.00

\$104,791.06

FURNITURE—

S. F. Heath & Co., type-writing table.....	\$27.00
Bradstreet, Thurber & Co., furniture and decorations.....	2,488.50
Minneapolis School and Office Furniture Co.....	3,500.00

\$6,015.50

LIGHTING—

Edison Light and Power Co., service.....

\$22.88

SUPPLIES—

Library bureau, sundries.....	\$334.47
C. T. Thompson.....	13.44
C. D. Whitall & Co., blanks and stationery.....	89.82
Minneapolis Stamp Co., stamps.....	8.25
Herbert Putnam, sundries.....	79.82
S. F. Heath & Co., supplies.....	3.40
Fred Bryquet, sundries.....	9.00
Geesaman & Murphy, printing.....	112.00
Tribune Job Printing Co., printing.....	535.41
Fairbanks, Morse & Co., truck and scales.....	49.77
Janney Bros., hardware.....	7.95
N. W. Star Oil Co., oil.....	8.10
T. M. Roberts, hardware.....	2.90
Minneapolis Stamp Co., stencil.....	.90
Harrison & Smith, printing.....	175.00
J. W. Lansing, sundries.....	13.20
McDonald Bros, lamp.....	3.50

\$1,646.93

BOOKS—

G. E. Steckert.....	\$1,817.76
S. M. Williams.....	1,224.50
Ed. Maybridge.....	125.00
C. C. Thompson.....	83.00
D. Appleton & Co.....	75.00
Mrs. W. H. McCauley.....	5.00
Virginia Historical Society.....	40.00
American Historical Society.....	7.00
Minneapolis Athenaeum.....	3,123.60
C. D. Whitall & Co.....	1,851.34
Frank H. Page.....	15.00
Miss Jessie Paine.....	3.50
W. H. C. Folsom.....	5.00
D. E. Bogart.....	19.00
W. Arnold.....	2.00

\$8,396.70

BINDING—

Harrison & Smith, binding books.....	\$282.23
P. Ringer & Co., binding books.....	167.90
H. C. Travis, binding books.....	309.39

\$759.52

FUEL—

V. Truesdell, fuel.....	\$18.00
M. T. Bowen Fuel Co., fuel.....	112.50
Minnesota Wood Supply Co., fuel.....	50.00

\$180.50

SALARIES—

Herbert Putnam, salary.....	\$2,083.26	
G. S. Gregory, salary.....	680.00	
A. P. Goodwin, salary.....	175.00	
K. Heiberg, salary.....	250.00	
Josephine Cloud, salary.....	250.00	
Louise I. Lynskey, salary.....	225.00	
Jessie McMillan, salary.....	140.00	
Mrs. M. C. Norton, salary.....	135.00	
Gratia Countryman, salary.....	90.00	
C. A. Atherton, salary.....	34.00	
		\$4,062.26

INSURANCE—

J. Thompson, Jr.....	\$140.77
----------------------	----------

INCIDENTALS—

John Baxter, rent.....	\$280.00	
C. A. Atherton, labor.....	120.50	
W. A. James, taxes.....	62.54	
Geesaman & Murphy, printing.....	13.50	
Douglas Volk, expressage.....	1.00	
Herbert Putnam, sundries.....	158.46	
C. F. Dubay, hauling.....	35.87	
C. A. Heffelfinger, boxes.....	1.05	
John McCarthy, hauling.....	3.25	
Allen Bros., supplies.....	7.25	
Cedar Lake Ice Co., ice.....	7.10	
L. A. Runge, sundries.....	107.60	
E. M. Johnson, sundries.....	48.25	
		\$846.37

JANITOR'S ACCOUNT—

L. Runge, salary.....	\$288.00	
J. Ludlum, salary.....	52.50	
		\$340.50

Total disbursements.....	\$127,202.99
--------------------------	--------------

Recapitulation.

January 1, 1889, By balance on hand.....	\$48,965.54
January 1, 1890, By receipts for twelve months.....	90,141.81
	\$139,107.35
January 1, 1890, To disbursements for twelve months.....	\$127,202.99
January 1, 1890, By balance on hand.....	\$11,904.36

CITY PARK FUND.

RECEIPTS AND DISBURSEMENTS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1889.

HOW CREATED.

A tax not to exceed 1 mill shall be levied upon all the taxable property of the city sufficient to defray the current expense of maintaining the public park system of the city for the next fiscal year.

Tax levied 1889, for 1890, 5-10 mill.....	\$63,550.93
Tree planting, special tax.....	2,676.00
Special assessments.....	67,304.60
	<hr/> \$133,531.53

Receipts.

BONDS—		
Proceeds of bonds, \$100,000 sold Coffin & Stanton.....	\$101,022.89	
Proceeds of bonds, \$41,000 sold Blake Bros. & Co.....	41,116.67	
		\$142,139.56
TAXES—		
March settlement with county treasurer.....	\$14,542.55	
June settlement with county treasurer.....	79,156.81	
November settlement with county treasurer.....	2,489.11	
		\$96,188.47
Proceeds of notes discounted.....		36,000.00
SUNDRIES—		
E. A. Stevens, secretary, sundry collections.....	\$355.80	
W. G. Nye, secretary, balance contingent fund.....	500.00	
W. G. Nye, secretary, on account privileges at Lake Calhoun.....	200.00	
State treasurer, balance of purchase money state park, Minnehaha, returned.....	7,716.94	
W. G. Nye, secretary, privileges at Lake Calhoun.....	200.00	
“ “ rent of boats.....	1,750.00	
“ “ “ Central park.....	461.55	
“ “ “ “.....	600.00	
“ “ privileges at Minnehaha park.....	1,300.00	
“ “ sundry collections.....	326.75	
Refund of warrants cancelled per resolution of park commissioners.....	589.20	
Refund of taxes.....	63.90	
Sale of lot 5, block 39, St. Anthony addition.....	1,500.00	
		\$15,564.14
Total receipts.....		\$289,802.17

Disbursements.

Payment of interest on bonds, salaries and expenses.....	\$37,901.88
Payment temporary loans.....	21,000.00
Purchase of land.....	105,138.44
Park improvements and maintenance.....	105,382.82
Trees and tree planting.....	3,375.34
Tools, implements and furniture.....	12,622.15
Paid to state treasurer and refunded by him.....	7,716.94
Secretary's contingent fund.....	1,000.00
Total disbursements.....	\$289,137.57

Recapitulation.

January 1, 1889, By balance on hand.....	\$2,739.76
January 1, 1890, By receipts for 12 months.....	280,892.17
	<hr/>
January 1, 1890, To disbursements for twelve months.....	\$292,631.93
	289,137.57
	<hr/>
January 1, 1890, Credit balance.....	\$3,494.76

SCHOOL FUND.

RECEIPTS AND DISBURSEMENTS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1889.

HOW CREATED.

A tax not to exceed 3 mills shall be levied upon all the taxable property of the city, sufficient to defray the current expense of the public schools of the city of Minneapolis, together with 1 mill of the 2 mill state tax, also per capita of the state school fund.

Tax levied 1889 for 1890, 3 mill.....	\$376,896.09
Tax levied 1889 for 1890, 1 mill.....	127,101.86
	<hr/> \$503,997.95

The apportionate paid by the state from the state school fund 1889, was \$78,646.82.

SCHOOL FUND.

Receipts.

Proceeds of notes discounted, same being advance on June settlement of taxes, 1890.....		\$302,624.99
TAXES—		
March settlement from county treasurer.....	\$80,123.73	
State apportionate of school fund.....	19,254.40	
Penalties.....	5,866.66	
Interest.....	942.04	
June settlement from county treasurer.....	307,875.86	
November settlement from county treasurer.....	10,246.42	
State apportionate of school fund.....	59,392.00	
	<hr/>	\$483,701.11
BONDS—		
Proceeds of \$125,000, 4 per cent., 30 years, sold to Brewster, Cobb & Estabrook.....	\$126,829.58	
Proceeds of \$75,000, 4 per cent., 30 years, sold to Blake Bros. & Co.	76,781.25	
	<hr/>	\$203,610.83
SUNDRIES—		
Refund on warrants Nos. 19,083-19,124.....	\$24.00	
Refund of warrants cancelled.....	173.00	
W. S. Pearson, secretary, tuition.....	403.30	
Refund on teachers' pay rolls.....	155.10	
Unclaimed balances on pay rolls.....	2.50	
W. S. Pearson, secretary, sale of seats.....	21.00	
" " sale of carpet.....	10.00	
" " sale of blackboard.....	7.75	
" " refund insurance premium.....	4.50	
" " sundry items.....	15.33	
" " sale Washington school bell.....	693.40	
" " sale of old building.....	110.50	
	<hr/>	\$1,620.38
Total receipts.....		<hr/> \$991,557.31

Disbursements.

RUNNING EXPENSE—		
Interest account.....	\$11,322.65	
Incidentals.....	3,832.15	
Supplies.....	5,508.75	
Repairs.....	17,816.11	
Janitors.....	29,826.45	
Insurance.....	3,658.43	
Office Expense.....	1,700.00	
Superintendent of buildings.....	3,294.04	
Teachers.....	338,424.90	
Rent.....	1,648.00	
Apparatus.....	2,440.76	
Fuel and lights.....	25,422.39	
	<hr/>	\$444,895.43
IMPROVEMENTS—		
Madison school.....	\$26,360.87	
Monroe school.....	16,014.39	
Real estate.....	27,200.00	
Holland school.....	243.85	
Furniture.....	11,663.64	
Seward school.....	359.86	
Adams school.....	500.00	
North Side High school.....	1,824.40	
Greeley school.....	398.03	
Corcoran school.....	21,817.59	
Grant school.....	31,754.29	
Clinton school.....	32,137.48	
Minnehaha school.....	15,777.49	
Hamilton school.....	13,509.80	
Advance for water mains and sewers.....	4,409.10	
	<hr/>	\$203,971.60
BILLS PAYABLE—		
Notes discounted being advance on June, 1889, settlement of taxes.....		\$309,500.00
Total disbursements.....		<hr/> \$958,367.03

Recapitulation.

January 1, 1890, By receipts for twelve months.....		\$991,557.31
January 1, 1889, To balance overdrawn.....	\$3,703.69	
January 1, 1890, To disbursements for twelve months.....	958,367.03	
	<hr/>	962,070.72
January 1, 1890, By balance on hand.....		<hr/> \$29,486.50

10th ward Sidewalk fund ..	49.22	13.43	103.09	13.43	152.31	138.88			138.88
10th " Sprinkling ..	20.50	606.22	583.44	606.22	622.94	16.72			16.72
11th " Street ..	186.35	7,391.56	7,540.25	7,391.56	7,735.60	344.04			344.04
11th " Sidewalk ..	442.45	18,290.79	17,233.91	18,290.79	17,676.36		730.53		197.10
12th " Sprinkling ..	719.90	3,719.66	3,113.36	3,719.66	3,833.26	113.60			113.60
12th " Street ..	161.38	5,978.18	6,258.98	5,978.18	6,420.98	442.18			442.18
13th " Sidewalk ..	91.54	1,379.09	1,180.72	1,379.09	1,281.26		97.83		
13th " Street ..	1,130.41	3,752.94	3,210.71	3,752.94	4,341.12	588.18			588.18
13th " Sidewalk ..	222.30		360.60		501.90	501.90			501.90
Total	\$283,517.20	\$4,563,186.54	\$4,720,164.53	\$4,640,240.04	\$5,003,681.75	\$414,720.80			
Cash in hands of treasurer January 1st, 1890	\$77,054.40				\$51,280.08				
Charge treasurer amount of net receipts	206,462.80								
Credit treasurer amount of net disbursements		\$4,720,164.55		\$4,926,627.35					
Cash in hands of treasurer January 1st, 1890			\$4,563,186.54		\$4,563,186.54				
Amount of warrants unpaid									
Cash in hands of treasurer as above, <i>vide</i> city comptroller's books	\$283,517.20	\$0,283,351.09	\$0,283,351.09	\$0,566,808.29	\$0,566,808.29	\$33,363.36			
Actual cash in hands of treasurer January 1st, 1890						363,440.81			
							396,804.17		
							\$42,243.03		\$42,243.03

Exhibit P

Shows the total disbursements on account of the general fund for the twelve months ending January 1, 1890; disbursements for ten months ending January 1, 1890; the amount appropriated; the total expended under the appropriation; the balance to be expended under the appropriation; and the accounts which are overdrawn:

	Disbursements for 12 months ending January 1, 1890.	Disbursements from Jan. 1, 89, to March 1, 89, when the new appropriation begins.	Disbursements from March 1, 1889, to January 1, 1890.	Appropriations from March 1, 1889, to March 1, 1890.	Balance of appropriation for mos. of January and February, 1890.	Appropriation overdrawn.
Police department.....	\$194,241.55	\$29,761.45	\$164,480.10	\$175,000.00	\$10,519.90	
Fire department.....	240,678.53	37,837.35	202,841.18	255,000.00	52,158.82	
Work house expense.....	22,143.28	3,495.85	18,647.43	25,000.00	6,352.57	
Engineer's department.....	43,769.28	6,535.38	37,233.90	41,000.00	3,766.10	
Poor department.....	30,217.09	6,274.50	23,942.59	36,000.00	12,057.41	
City hall expense.....	12,891.32	3,334.77	9,556.55	10,500.00	943.45	
Printing and stationery..	10,833.76	4,853.20	5,980.56	7,500.00	1,519.44	
Municipal court.....	14,616.16	2,866.13	11,750.03	14,000.00	2,249.97	
Health department.....	20,510.56	3,416.97	17,093.59	17,000.00		\$93.59
Building inspectors.....	7,348.72	1,179.45	6,169.27	9,000.00	2,830.73	
Roads and bridges.....	8,252.86	585.85	7,667.01	7,000.00		667.01
Pounds.....	3,727.48	691.09	3,036.39	4,500.00	1,463.61	
Salaries of city officials..	69,053.42	6,376.32	62,677.10	65,000.00	2,322.90	
Street opening expense..	2,712.50	90.00	2,622.50	3,500.00	877.50	
Street lighting expense..	157,764.93	31,035.76	126,729.17	168,000.00	41,270.83	
City hospital.....	12,237.32	2,845.56	9,491.76	12,400.00	2,908.24	
City assessor's departm't.	8,974.52	682.82	8,291.70	7,500.00		791.70
Incidentals, viz.....	6,289.59	1,008.05	5,281.54	6,000.00	718.46	
Miscellaneous.....	\$2,933.80					
Legal expenses.....	1,587.64					
Watering trough						
repairs.....	378.23					
Election expenses.....	389.92					
Total.....	\$866,362.87	\$142,870.50	\$723,492.37	\$863,900.00	\$141,959.93	\$1,552.30

*Disbursements for 12 months ending Jan. 1, 1890, (brought forward).....

Tax penalty refund.....		\$15.02	\$866,362.87
Legal damages settled by suit.....	\$621.44		
without suit.....	1,464.12		

Bethany Home.....		2,085.56	
		2,700.00	
			\$4,800.58

Contingent Fund, created by Legislative Act, Total Expenditures not to exceed \$10,000 in any one year.

Relief Dakota sufferers.....	\$1,400.00
G. A. R. Memorial Day.....	175.00
Interest on note given for purchase of Soldiers' Home site..	1,669.80
Street illumination during exposition, 1889.....	3,000.00
Entertainment of Pan-American delegation.....	1,917.15
Entertainment of Montreal city council.....	229.25
	\$8,391.20

Authorized by Acts of Legislature.

Extra salary of city clerk and salary of employees since May 1	\$1,348.70
J. V. Demott claim vs. Ninth ward.....	1,116.65
V. Reeves claim vs. Tenth ward.....	1,000.00
Illuminating Nicollet avenue during exposition, season 1888.	4,488.60
Award for the apprehension of the murderers of Ed. Tolefson	1,000.00
	\$8,953.95

Refund on plumbers' permits.....	1,088.24
Expense on Edison conduits.....	1,621.04
* Expense and refund Dorsett conduits.....	3,909.89
Expense N. W. Telephone Exchange conduits.....	1,165.78
Expense street railway street repairs.....	1,736.79
	\$9,521.74

Refund of Meat Peddlers' License.

Filbery & McCune.....	\$75.00
W. C. Brix.....	75.00
S. Schlukbeier.....	75.00
	\$225.00

Total.....

\$808,255.34

* These items are covered by credits, see * folio 70.

GENERAL FUND.

RECEIPTS AND DISBURSEMENTS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1889.

HOW CREATED.

"A tax not to exceed 6-10 of 1 per cent. shall annually be levied upon all the taxable property of the city, which amount in addition to the other revenue of the city, such as licenses, fines, rents, etc., and applicable thereto, shall be sufficient to defray the current running expenses of the city for the next fiscal year, not including the expense of the various boards, and the expense of the several wards which are assessed separately."

REVENUE FOR 1890.—

Tax levied 1889 for 1890, 4-7-10 mills.....	\$597,378.75
Licenses, fines, rents, etc., (estimated).....	330,000.00
	<hr/> \$927,378.75

Receipts.

TAXES—

March settlement from county.....	\$146,778.42
June settlement from county.....	496,237.04
November settlement from county.....	16,763.26
	<hr/> \$659,778.72

LICENSES—

250 liquor, at \$1,000 each.....		\$250,000.00
Circus and menagerie, one day.....	\$1,200.00	
4 theatres, 12 months, \$250.....	1,000.00	
1 theatre and museum, 12 months.....	500.00	
Special amusements.....	175.00	
5 auctioneers, 12 months, \$200.....	1,000.00	
10 mens' intelligence, 12 months, \$150.....	1,500.00	
1 mens' intelligence, 6 months.....	75.00	
161 pool tables at \$5, 12 months.....	805.00	
22 pool tables at \$2.50 6 months.....	55.00	
47 two horse hacks at \$10, 12 months.....	470.00	
9 " " " 7.50, 9 ".....	67.50	
5 " " " 5.00 6 ".....	25.00	
1 " " " 2.50, 3 ".....	2.50	
19 one " " 5.00, 12 ".....	95.00	
6 " " " 3.75, 9 ".....	22.50	
3 " " " 2.50, 3 ".....	7.50	
16 scavengers, at \$16.67.....	266.72	
1 bowling alley, \$12.50, 6 months.....	12.50	
54 wagon peddlers, \$75, 12 months.....	4,050.00	
2 curiosity halls, at \$5.....	10.00	
141 two horse express, \$10, 12 months.....	1,410.00	
13 " " " 7.50, 9 ".....	97.50	
3 " " " 5.00, 6 ".....	15.00	
13 " " " 2.50, 3 ".....	32.50	
136 one " " 5.00, 12 ".....	680.00	
14 " " " 3.75, 9 ".....	52.50	
10 " " " 2.50, 6 ".....	25.00	
15 " " " 1.25, 3 ".....	18.75	
92 foot peddlers, \$10, 12 months.....	920.00	
20 foot peddlers, \$5, 6 months.....	100.00	
6 pawn brokers, \$100, 12 months.....	600.00	
3 pawn brokers, \$50, 6 months.....	150.00	
7 hotel runners, \$25, 12 months.....	175.00	
3 hotel runners, \$12.50, 6 months.....	37.50	
15 ladies' intelligence, \$10, 12 months.....	150.00	
1 ladies' intelligence, \$12.50 6 months.....	12.50	
1 ladies' intelligence, \$5, 6 months.....	5.00	
2 shooting galleries, \$25, 12 months.....	50.00	
6 push carts, \$50, 12 months.....	300.00	
	<hr/>	\$16,170.47

Total.....

\$266,170.47

RENT—

Western Union Telegraph Co., twelve months, at \$160 per month, city hall.....	\$1,920.00
N. W. Telephone Exchange Co., twelve months, at \$60 per month, city hall.....	720.00
Flour City Transfer Co., twelve months, at \$40 per month, 4th street barn.....	480.00
Noah Adams, rent barn on 4th street, to January 1st, 1889.....	66.67

\$3,186.67

ELECTRIC LIGHT—

Western Union Telegraph Co., twelve months, at \$25 per month.....	\$300.00
N. W. Telephone Exchange Co., twelve months, at \$16.67 per month.....	200.04

\$500.04

IMPOUNDING—		
T. Smith, fines.....	\$1.00	
Simon Porter, January to November.....	17.50	
Peter Mohnson, three months.....	1.50	
George Loye, March to October.....	36.75	
W. O'Brien, April to October.....	109.15	
James Lund, May, June and July.....	8.00	
E. A. Christianson, April to November.....	84.50	
M. Lund, April.....	1.00	
Octavius LaFlur, April to November.....	40.25	
Martin Peterson, March to October.....	59.00	
CITY SCALES—		
Rufus Roberts, fees, June to December.....		\$358.65
		\$117.45
MUNICIPAL COURT—		
January, fines and fees.....	\$1,465.58	
February.....	1,793.70	
March, " ".....	1,575.24	
April, " ".....	2,003.45	
May, " ".....	2,904.00	
June, " ".....	3,144.03	
July, " ".....	4,054.09	
August, " ".....	3,873.08	
September, " ".....	4,165.08	
October, " ".....	5,190.07	
November, " ".....	4,651.07	
December, " ".....	3,883.28	
ENGINEER'S PERMITS—		
* From January 1, 1889, to January 1, 1890.....	\$9,071.89	\$38,672.67
Minneapolis Street Ry. Co., street work.....	1,409.59	
CITY CLERK—		
May receipts paid into city treasury.....	\$4,725.40	\$10,481.48
June " " " ".....	670.50	
July " " " ".....	342.00	
August " " " ".....	283.20	
September " " " ".....	224.60	
October " " " ".....	232.50	
November " " " ".....	155.80	
December " " " ".....	165.70	
*Total.....		\$6,799.70
4,532 male dog licenses, at \$1 each.....	\$4,532.00	
405 female dog licenses, at \$2 each.....	810.00	
11,083 chattel mortgages filed, at 10 cents each.....	1,108.30	
2,144 chattel mortgage satisfactions, at 10 cents each.....	214.40	
60 plumber licenses at \$2 each.....	120.00	
* Candidates' Fees, Special Election, Eighth Ward—		
F. E. Hanson, Republican.....	5.00	
A. W. Paris, Democratic.....	5.00	
J. S. Garvin, Prohibitionist.....	5.00	
Total.....	\$6,799.70	
SUNDRIES—		
Old warrants cancelled by resolution of city council.....	\$137.90	
Warrant No. 3,181 order W. A. Barnes & Co., turned back.....	150.00	
Warrant No. 3,147 order J. B. Phelps, turned back.....	2.50	
Error in warrant No. 37,697 order Minn. Brush Elec. Co. corrected.....	40	
Error in warrant No. 37,921 order C. D. Whitall & Co., corrected.....	20	
Chas. A. Cornman, sale of city ordinances.....	3.00	
Board of education, printing bonds and advertising.....	163.75	
F. L. Stetson, sale of horses.....	500.00	
F. L. Stetson, repairing.....	32.43	
F. L. Stetson, sale of harness weights.....	14.37	
F. L. Stetson, sale of carboys.....	52.20	
Refund Mayville Lime & Cement Co., error in bill.....	65.36	
Refund John S. Bower, error in bill.....	30.40	
W. H. Lauderdale, paid taxes on land condemned by the city for street.....	29.66	
Refund from police pay roll, Jerry Sullivan January and February pay.....	115.50	
Refund from New England Furniture Co., overcharge on linoleum for health department.....	1.81	
Refund from A. R. Camp, judge of election, fees allowed clerk.....	9.00	
Refund from work house pay roll, Auger Taylor.....	12.00	
Insurance from Hartford Steam Boiler and Inspection Co., damages resulting from explosion of city hall boilers.....	274.39	
John West, superintendent of work house, sale of vegetables.....	46.40	
John West, board of county prisoners and sale of vegetables.....	146.68	
Unclaimed balances on pay rolls.....	67.79	
Refund from M. R. Curtiss, superintendent of poor, Jan., 1889.....	186.71	
Refund from M. R. Curtiss, superintendent of poor, Feb., 1889.....	47.00	
Care of sick Sister M. Philomena.....	70.00	
Transfer of license.....	1.00	
Refund on city officials pay rolls.....	16.67	
Wyckoff, Seamans & Benedict, discount on typewriter for office of city clerk.....	9.75	
		\$2,183.87
Total receipts.....		\$988,249.72

*Disbursements.***POLICE DEPARTMENT EXPENSES—**

Force salaries.....	\$179,566.04
Board of police commissioners salary, January 1, 1889, to April 21, 1889.....	888.00
Board of police commissioners, expense trip to Boston.....	331.04
Board of police commissioners, incidentals.....	286.00
Drugs.....	110.13
Incidentals.....	260.76
Groceries.....	69.78
Handcuffs.....	70.31
Meals to prisoners.....	1,001.60
Patrol sleigh and wagon.....	501.50
Scavenger services.....	46.50
Livery.....	110.00
Laundry.....	61.30
Electric supplies.....	157.87
Gas bills.....	1,154.52
Feed.....	363.37
Rent of stations.....	883.34
Fuel.....	903.60
Printing and stationery.....	718.03
Hardware.....	84.49
Clubs, belts, plates and cords.....	408.20
Repairs central lockup.....	1,039.06
Insurance on horses, wagons, harness, etc.....	13.50
Insurance on boilers central lockup.....	18.75
Special detective service.....	387.86
Keeping team, No. Minneapolis station.....	119.00
Oil.....	16.10
Analysis of wine.....	12.00
Telephone service.....	793.80
Telegraph service.....	139.65
Surgeons consultation Capt. Bosworth, and examination of Officer McLaughlin.....	101.25
Stars.....	25.00
Helmets.....	210.00
Buttons.....	105.35
New Furniture and repairs.....	468.25
Legal services, Robinson & Baker.....	200.00
Harness and repairs.....	159.71
Gray horses.....	400.00
Photo of "Crooks".....	49.00
Horseshoeing.....	115.35
Wagon repairs and painting.....	173.95
Pay roll, specials, Minneapolis Street Ry. Co. strike.....	1,136.00
Livery, Minneapolis Street Ry. Co. strike.....	391.00
Rent of bedding, Minneapolis Street Ry. Co. strike.....	24.00
Moving 5th precinct station.....	76.50

\$194,241.55

FIRE DEPARTMENT EXPENSE—

Salaries.....	\$182,885.23
Property purchased.....	19,987.93
Fire alarm telegraph.....	11,291.66
Forage.....	7,406.68
Fuel and lights.....	4,754.01
Repairs to buildings.....	4,205.28
Repairs to apparatus and equipments.....	3,071.45
Store room supplies.....	1,419.13
Horseshoeing.....	1,405.00
Laundry.....	736.99
Telephone rent.....	675.65
Scavenger.....	570.04
Freight and express.....	485.81
Printing and stationery.....	442.79
Ice for seasons of 1888 and 1889.....	394.00
Soft soap.....	376.93
Drugs.....	163.97
Repairs to harness.....	163.82
Material for new harness.....	88.91
Acid and soda for extinguishers.....	153.25

\$240,678.53

WORK HOUSE EXPENSE—

Salaries.....	\$9,388.71
Groceries and provisions.....	2,210.63
Meat.....	1,341.06
Flour.....	1,138.60
Removal of building and repairs.....	777.24
Lumber.....	694.70
Paints.....	73.79
Supplies and repairs to steam heating plant.....	326.99
Hardware.....	653.79
Feed and straw.....	677.96
Soap and soap stock.....	105.91
Harness and repairs.....	98.70

Dry goods and clothing.....	1,241.66	
Horseshoeing and blacksmithing.....	138.81	
Shoe findings.....	127.33	
Fuel and lights.....	2,328.94	
Stationery.....	60.44	
Postage stamps.....	21.00	
Furniture.....	179.12	
Crockery and glassware.....	65.30	
Drugs.....	171.22	
Printing reports.....	40.75	
Telephone service.....	33.00	
Two cows.....	70.00	
Garden seeds and plants.....	47.15	
John West, superintendent, sundries.....	42.65	
Incidentals.....	87.83	
		\$22,143.28
ENGINEER'S DEPARTMENT—		
Salaries.....	\$42,173.71	
Stationery and printing.....	1,049.22	
Instruments and repairs.....	158.15	
Incidentals.....	63.74	
Blacksmithing.....	5.18	
Hardware.....	84.93	
Maps.....	59.50	
Livery.....	106.60	
Telephone.....	21.00	
Postage.....	27.00	
Copy assessment rolls.....	20.25	
		\$43,769.28
REFUND PLUMBER'S PERMITS—		
Refunded on plumber's permits.....		\$1,088.24
STREET LIGHTING—		
Minneapolis Gas Light Co.....	\$41,677.54	
Minnesota Brush Electric Co.....	67,873.02	
Northwestern Globe Gas Light Co.....	17,442.55	
Sun Vapor Street Light Co.....	17,147.06	
Wheeler Reflector Co.....	13,110.14	
Moving lamp posts, printing schedule cards, etc.....	514.62	
		\$157,764.93
STREET OPENING EXPENSE—		
Services of Commissioners.....	\$2,695.00	
Taxes paid on land taken.....	17.50	
		\$2,712.50
SALARIES OF CITY OFFICIALS—		
Salary of mayor and thirty-nine aldermen.....	\$30,080.00	
Salary of other city officials.....	\$38,973.42	
		\$69,053.42
ASSESSOR'S DEPARTMENT—		
Salaries.....	\$8,235.53	
Leather case for charts.....	10.00	
Blank books, printing, stationery.....	371.39	
Correcting atlas and plats.....	183.00	
Maps.....	14.10	
Index to unsettled estates.....	30.00	
Horse hire.....	125.50	
Incidentals.....	5.00	
		\$8,974.52
CONTINGENT FUND—		
Relief Dakota sufferers.....	\$1,400.00	
G. A. R. Memorial day.....	175.00	
Interest on notes, soldier's home.....	1,669.80	
Appropriation, exposition lights.....	3,000.00	
Entertaining Pan American delegates.....	1,917.15	
Entertaining Montreal city council.....	229.25	
		\$8,391.20
CONDUITS, EDISON'S—		
Labor.....	\$1,326.21	
Sand and gravel.....	245.55	
Lumber.....	46.98	
Hardware.....	2.30	
		\$1,621.04
CONDUITS, NORTHWESTERN TELEPHONE EXCHANGE—		
Labor.....	\$1,004.78	
Sand and gravel.....	153.75	
Hardware.....	7.25	
		\$1,165.78
MINNEAPOLIS STREET RAILWAY, STREET REPAIRS—		
Labor.....	\$1,544.59	
Hardware.....	3.20	
Sand and gravel.....	189.00	
		\$1,736.79
WATERING TROUGHS REPAIRS—		
Labor.....	\$15.75	
Fountains.....	287.10	
Repairs.....	75.38	
		\$378.23

TAX PENALTY FUND—		
Tax penalty refunded.....		\$15.02
CORRUPTIONS, DORSETT—		
Labor.....	\$1,654.70	
Sand and gravel.....	253.83	
Hardware.....	2.65	
Lumber.....	13.04	
Refunded.....	2,005.67	\$3,900.89
BUILDING INSPECTOR—		
Salaries.....	\$6,646.95	
Telephone service.....	39.15	
Books, blanks, printing and stationery	503.87	
J. M. Hazen—Railroad fare and other expense to Chicago.....	20.00	
" " " New York....	117.00	
Incidentals.....	21.75	\$7,348.72
CLAIMS AGAINST THE CITY OF MINNEAPOLIS, AUTHORIZED BY ACTS OF THE STATE LEGISLATURE—		
Illuminating Nicollet avenue, season 1888.....	\$4,488.60	
Award for the apprehension of the murderers of Ed. Tollefson,	1,000.00	
J. V. DeMott claim vs. Ninth ward	1,116.65	
V. Reeves claim vs. Tenth ward.....	1,000.00	\$7,605.25
SALARIES, ETC., AUTHORIZED BY AN ACT OF THE LEGISLATURE—		
Chas. F. Haney, city clerk, eight months at \$25 per month.....	\$200.00	
Miss R. M. Reed, clerk in city clerk's office, eight months at \$70		
per month.....	560.00	
L. G. Cosad, clerk in city clerk's office, eight months at \$65 per		
month.....	520.00	
Mrs. E. J Sturtzel, clerk city clerk's office	68.70	\$1,348.70
ROADS AND BRIDGES—		
Salaries, bridge watchmen.....	\$3,215.26	
" others.....	1,652.05	
Repairing, lumber, hardware and other material.....	2,972.00	
Fuel.....	112.35	
Painting signs.....	27.00	
Sprinkling bridges.....	236.00	
Stars for bridge watchmen.....	3.00	
Incidentals.....	35.20	\$8,252.86
ELECTIONS—		
Balance due on election, November, 1888.....	\$74.50	
Alderman Eighth ward (Dr. F. E. Hanson,) elected	1,315.42	\$1,389.92
SALARY AND POUNDS EXPENSE—		
Pay roll, poundmasters.....	\$3,521.68	
Rent.....	144.35	
Feed.....	7.20	
Refunded excessive fees.....	\$29.25	
"	25.00	54.25
BBETHANY HOME—		\$3,727.48
Amount paid from fines under provision of city charter		\$2,701.00
PRINTING AND STATIONERY EXPENSE—		
Printing and stationery, mayor, comptroller, treasurer, city		
clerk	\$1,436.10	
Publishing council proceedings, per contract.....	5,767.91	
Re-setting, printing, indexing and binding council proceedings		
prior to 1889.....	3,247.00	
Printing bonds and checks.....	382.75	\$10,833.76
LICENSE REFUNDS—		
Tilburg and McCune, meat peddlers.....	\$75.00	
W. C. Bix, meat peddler	75.00	
E. Schluckebier, meat peddler.....	75.00	\$225.00
CITY HALL EXPENSE—		
Salaries of regular employees.....	\$4,232.27	
Salaries of engineer's department, for extra labor.....	455.70	
Insurance.....	300.00	
Gas.....	326.36	
Drugs and chemicals.....	34.65	
Ice bills, seasons 1888 and 1889	315.00	
Covering steam pipe, city clerk's office.....	10.56	
Electric supplies for electric plant.....	765.23	
Fuel, city hall	3,779.03	
Hardware	175.32	
Telephone service.....	12.00	
Letter chute.....	10.00	
Oil.....	95.99	
Hauling rubbish.....	18.00	
Soap and soap stock.....	28.53	

Brooms, brushes and mops.....	35.00	
Repairs, mayor's office, police department, etc.....	1,070.56	
New furniture and repairing old.....	429.00	
Lumber.....	102.56	
Repairs to engine room and boilers, (result of explosion) damage covered by insurance.....	570.37	
Incidentals.....	125.19	
		\$12,891.32

MUNICIPAL COURT EXPENSE

Salaries.....	\$11,249.61	
Gas bills.....	54.36	
Incidentals.....	11.95	
Books, blanks, printing and stationery.....	718.05	
New furniture and repairing old.....	40.75	
Law books.....	67.00	
Meals to jurors.....	4.55	
Ice, seasons 1888 and 1889.....	49.00	
Repairing.....	314.84	
Rent of municipal court (fifteen months at \$1,500 per annum) ..	1,875.00	
Telephone service.....	33.00	
R. A. Daly, clerk, for sundries.....	42.15	
Fuel.....	143.40	
Insurance.....	12.50	
		\$14,616.16

LEGAL EXPENSES AND DAMAGES

Office rent.....	\$126.67	
Incidentals.....	43.90	
Printing briefs.....	220.20	
Printing briefs on U. S. Supreme Court cases.....	582.95	
Costs of suits.....	55.47	
Furniture, office.....	11.00	
Securing evidence, witness fees, etc.....	160.80	
Fees, recording.....	204.72	
Fees, transcripts.....	137.68	
Stationery.....	34.25	
Law books.....	10.00	
Swanson Johnson, injured in sewer construction.....	325.00	
C. P. Enstad, damages overflow of sewer.....	80.00	
C. Boucher, damage overflow of sewer.....	117.75	
P. S. Pasha, damages overflow of sewer.....	25.00	
Mrs. George Wilson, injury by fire department.....	150.00	
W. S. Hall, injury by fire department.....	25.00	
David Tice, injury by fire department.....	112.00	
Suit, Harden vs. city, costs supreme court.....	50.05	
Suit, Cyrus E. Hall vs. city.....	298.04	
Suit, Cyrus E. Hall, guardian, vs. city.....	323.40	
Suit, St. Anthony Falls W. P. Co. vs. city, costs supreme court.....	151.20	
James Byrnes, in full for damages overflow of sewer.....	50.00	
G. I. Maynard, in full for damages to buggy.....	5.00	
Henry A. Mitchell, in full for damages to horses and hack.....	25.00	
Swan Ingval, damage straightening Bassett's Creek, 1883.....	60.00	
Edward Wickstrom, money taken from him by Capt. Harvey, of police force.....	88.12	
		\$3,673.20
Recapitulation—Legal expense.....	\$1,587.64	
Legal damages settled by suit.....	621.44	
Legal damages settled without suit.....	1,464.12	
		\$3,673.20

POOR DEPARTMENT—

Salaries.....	\$2,483.32	
Groceries.....	7,399.64	
Fuel.....	2,894.25	
Medicines.....	166.61	
Sundries, per superintendent of poor.....	389.25	
Board of Poor, Hennepin county poor farm.....	6,196.03	
“ “ “ Homoeopathic hospital.....	763.01	
“ “ “ Deaconess hospital.....	267.64	
“ “ “ Northwestern hospital.....	1,071.19	
“ “ “ St. Mary's hospital.....	142.59	
“ “ “ St. Barnabas hospital.....	52.29	
“ “ “ Sisterhood of Bethany.....	3,597.58	
Nursing.....	52.29	
Transportation.....	1,858.66	
Livery.....	523.00	
Burials.....	1,711.00	
Digging graves at quarantine hospital.....	144.75	
Repairs, quarantine hospital.....	266.64	
Repairs, ambulance.....	40.00	
Printing and stationery.....	80.57	
Incidentals.....	116.78	
		\$30,217.09

INCIDENTALS—

Commissions paid National Park Bank, N. Y.....	\$441.40
Repairing desk.....	17.25
Towel Exchange.....	23.40
Postage stamps.....	39.75
Telephone service, city treasurer and city clerk.....	63.00
Express paid on bonds.....	67.50
License tags.....	107.50
Expense of committee to Sault Ste. Marie.....	75.00
Expense of committee to Superior, Wis., water ways.....	30.00
Extra compensation to Frank Gaylord, elevator attendant, running elevator nights.....	60.00
Microscope for meat inspector.....	50.00
Twenty-five city directories.....	125.00
Telegrams.....	24.17
Hand stamps.....	45.70
Certified copies of special laws.....	28.75
F. DeHarven, extra compensation as sidewalk inspector.....	263.23
E. H. Moulton, city treasurer, postage, telegrams, etc.....	54.89
Killing dogs, per report dog-catcher.....	706.00
Livery.....	91.00
Sundries.....	300.26
J. Frank Perry, expert accountant, examining the books of the various departments.....	320.00

\$2,933.80

CITY HOSPITAL EXPENSE—

Salaries.....	\$3,320.35
Surgical instruments and appliances.....	95.86
Milk.....	961.58
Drugs, wines and liquors.....	1,786.99
Groceries.....	1,631.22
Flour.....	269.50
Meat.....	905.35
Vegetables.....	53.90
Dry goods and clothing.....	190.56
Fuel.....	845.87
Gas bills.....	603.90
Stationery and printing.....	24.60
New furniture and repairing old.....	38.70
Straw.....	17.50
Hardware.....	80.22
Repairs and building.....	228.63
Scavenger service.....	99.00
Board of patients.....	14.42
Rent.....	1,040.00
Telephone service.....	35.00
Ground flax seed and oil meal.....	72.00
Incidentals.....	22.17

\$12,337.32

EXPENSES HEALTH DEPARTMENT—

Salaries.....	\$14,004.76
Printing and stationery.....	694.88
Hardware.....	64.50
Advertising.....	18.00
Repairs at crematory.....	102.92
Telephone service, 11 months.....	99.00
Removal of dead animals, per contract 1 month.....	358.33
Scavenger service.....	548.50
Subscription to sanitary papers.....	19.00
Rent of dump.....	480.00
Rent of crematory.....	180.00
Livery.....	28.50
Veterinary surgeon's services.....	182.75
Analysis of water.....	14.00
Stencils.....	13.75
Repairs at dump.....	110.16
Law books.....	10.00
Maps for annual report.....	75.00
Incidentals.....	13.69
Postage.....	55.74
Expenses of two investigating committees to Chicago.....	336.50
Expenses of Dr. S. S. Kilvington to New York, to A. P. H. A.....	89.00
Telegrams.....	14.73
Railway fare of patients.....	1.50
Express on books and newspapers.....	6.33
Fuel for crematory.....	794.55

\$18,316.11

VACCINATION, MAINTAINING QUARANTINE AND QUARANTINE HOSPITAL EXPENSES—

Professional services to small pox patients.....	\$345.00
Clothing destroyed.....	55.25
Dry goods and clothing.....	172.15
Fuel.....	264.80
Vaccine points.....	188.09
Meat.....	62.87
Drugs and disinfectants.....	350.84

Lime.....	11.80	
Live stock " hogs".....	10.00	
Groceries.....	269.73	
Horseshoeing.....	31.75	
Blacksmith bills.....	9.09	
Nursing sick.....	50.00	
Furniture.....	48.85	
Laundry.....	6.16	
Feed.....	131.91	
Harness and repairs.....	26.50	
Rubber goods.....	45.85	
Repairs and ambulance.....	58.95	
Filling ice house.....	32.00	
Garden seeds.....	15.11	
Combination fence.....	58.00	
Fruit.....	.75	
		\$2,194.45
		\$20,510.56
Total disbursements.....		\$898,255.34

Recapitulation.

January 1, 1889, by balance on hand.....	\$44,792.51	
January 1, 1890, by receipts for twelve months.....	988,249.72	
Total.....		\$1,033,042.23
January 1, 1890, to disbursements.....		898,255.34
January 1, 1890, balance on hand.....		\$134,786.89

INTEREST FUND.

RECEIPTS AND DISBURSEMENTS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1889.

HOW CREATED.

"A tax shall annually be levied upon all the taxable property of the city, sufficient to pay the interest to become due during the next fiscal year upon all bonds or debt of the city."

Tax levied 1889 for 1890, 2.1-10 mills..... \$266,913.91

INTEREST FUND.

By credit balance, January 1, 1889..... \$66,388.51

Receipts.

By taxes, March settlement.....	\$47,082.56	
By taxes, June settlement.....	187,526.07	
By taxes, November settlement.....	6,325.73	
	\$240,934.36	
By accrued interest on bonds sold.....	411.11	
		\$241,345.47
Total credits.....		\$307,733.98

Disbursements.

To paid interest on bonds during the year 1889.....	\$247,612.50
January 1, 1890, credit balance.....	\$60,121.48

PERMANENT IMPROVEMENT REVOLVING FUND.

RECEIPTS AND DISBURSEMENTS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1889.

HOW CREATED.

"There is hereby created a special fund, to be called "The Permanent Improvement Revolving Fund," to which shall be credited the principal sum of each of the installments of all special assessments assessed and levied by said city council, which are to be paid in five (5) equal annual installments.

The above assessments include the special assessments for sewer, paving and curb and gutter."

SPECIAL ASSESSMENTS OF 1889 FOR 1890—

One-fifth of curb and gutter, special assessments.....	\$39,832.25	
One-fifth of pavement, special assessments.....	78,604.71	
One-fifth of sewer, special assessments.....	101,200.80	
		\$219,637.76

Receipts.

TAXES—		
March settlement from county treasurer.....	\$8,855.01	
June settlement from county treasurer.....	183,702.17	
November settlement from county treasurer.....	4,521.06	
		\$197,078.24

ADVANCES—

Amount advanced for sewers built season of 1889, same to be refunded after the assessments have been collected.....		\$64,837.37
---	--	-------------

BONDS—

Proceeds of \$50,000, 4 per cent., 30 years bonds, sold to Blake Bros. & Co.....	\$48,710.00	
Proceeds of \$100,000, 4 per cent., 30 years bonds, sold to Municipal Investment Co.....	98,526.00	
Proceeds of \$50,000, 4 per cent., 30 years bonds, sold to Brewster, Cobb & Estabrook.....	50,731.84	
		\$197,967.84

SUNDRIES—

Sale of sewer pipe.....	\$28.96	
Refund of warrants cancelled by resolution of city council....	20.70	
Refund pay rolls.....	63.97	
		\$113.63

City's share of sewer, paving, curb and gutter for season of 1889, this amount having been advanced by the revolving fund to the permanent improvement fund, same adjusted at the close of season 1889, as follows:

Sewer construction.....	\$241,681.71	
Paving.....	26,503.91	
Curb and gutter.....	1,755.06	
		\$270,030.68

Total receipts.....		\$730,027.76
---------------------	--	--------------

Disbursements.

SEWER CONSTRUCTION—

Labor.....	\$336,315.45	
Brick.....	99,019.62	
Rock.....	10,955.61	
Cement.....	36,569.92	
Sewer pipe.....	7,357.47	
Lumber and other material.....	48,543.43	
		\$538,761.50

CURB AND GUTTER—

Ring & Tobin, contractors.....	\$25,610.66	
Labor.....	442.74	
Resetting, repairing and sundries.....	2,005.09	
		\$28,058.49

CEDAR BLOCK PAVING—

Contractors.....	\$83,852.24	
Labor.....	409.60	
Sundries.....	206.79	
		\$84,468.63

GRANITE BLOCK PAVING—

Pay rolls.....	\$605.12	
Sundries.....	16.15	
		\$621.27

TAXES REFUNDED—

Sewer, curb and gutter and paving taxes refunded.....		\$16,416.88
Engineer certificates, taxes annulled.....		\$49,161.62

SPECIAL TAX EXPENSE—	
Printing and postal cards.....	\$85.80
L. A. Condit, for descriptions.....	575.62
Recording and filing engineer certificates.....	400.00
Books.....	10.00
Adjusting accounts of city and county—pay rolls.....	\$1,071.42
Advance for sewer construction returned to H. F. Lillibridge.....	120.00
Advance for cedar block paving returned Janney, Semple & Co.....	950.00
	890.79
Total disbursements.....	\$720,520.60

Recapitulation.

January 1, 1889, to balance overdrawn.....	\$53,905.63
January 1, 1890, to disbursements for twelve months.....	720,520.60
	\$774,426.23
January 1, 1890, by receipts for twelve months.....	730,027.76
January 1, 1890, to balance overdrawn.....	\$44,398.47

PERMANENT IMPROVEMENT FUND.

RECEIPTS AND DISBURSEMENTS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1889.

HOW CREATED.

“A tax not to exceed 2½ mills shall annually be levied upon the total assessed valuation of the city, for the purpose of defraying the expense of the city's part of all public improvements, that is the expense of all improvements not provided for by special assessments.”

Tax levied 1889 for 1890—2 mills.....	\$254,203.73
Street opening, special assessment.....	29,208.00
	\$283,411.73

Receipts.

TAXES—	
March settlement from county treasurer.....	\$38,045.74
June settlement from county treasurer.....	209,202.02
November settlement from county treasurer.....	6,327.65
	\$253,575.41
BONDS—	
Proceeds of \$200,000 bonds, 30 years 4 percent., sold to R. L. Day & Co.....	\$198,632.00
Proceeds of \$125,000 bonds, 30 years 4 percent., sold to Brewster, Cobb & Estabrook.....	126,829.58
Proceeds of \$100,000 bonds, 30 years 4 percent., sold to Brewster, Cobb & Estabrook.....	102,639.00
	\$428,100.58
SUNDRIES—	
Minneapolis Gas Co., advance for paving repairs.....	\$206.05
54 old warrants cancelled per resolution of city council.....	220.13
J. C. Plant, repairs on cedar block paving.....	9.00
Refund from C. A. Nimocks, paying tax 1885.....	33.00
N. S. Woolen mill, repairs on granite block paving.....	20.00
Kate G. Reibith, error in award-street opening No. 365.....	50.00
Joseph Cardinal, part of lot No. 135, Woolford, Sidle and R addition.....	400.00
F. Dayer, building on lot No. 1, block No. 5.....	310.00
N. W. Fire and Marine Insurance Co., damage to crematory.....	219.41
Pacific Fire Insurance Co., damage to crematory.....	219.41
Refund error in North Minneapolis tunnel pay roll.....	31.50
Unclaimed balances in pay rolls.....	461.13
Warrant No. 10,827, order James Pauly for sewer built on Nicolet avenue, 1883.....	200.00
Warrant No. 45,035, order Ringwall for rock, same included in former bill to F. Cook's estate, cancelled by order of council.....	34.87
	\$2,414.50
Total receipts.....	\$634,090.49

Disbursements.

NORTH MINNEAPOLIS SEWER TUNNEL—			
Labor.....	\$15,286.79		
Brick.....	2,411.70		
Cement.....	2,750.25		
Rock and other materials.....	5,313.06		
SOUTH MINNEAPOLIS SEWER TUNNEL—			\$25,761.80
Labor.....	\$2,506.12		
Cement.....	873.80		
Rock and other materials.....	2,669.11		
SOUTHEAST MINNEAPOLIS SEWER TUNNEL—			\$6,139.12
Labor.....			\$1,272.80
NORTHEAST MINNEAPOLIS SEWER TUNNEL—			
Pay rolls.....	\$13,604.10		
Brick.....	286.65		
Cement.....	4,308.78		
Rock and other materials.....	6,752.17		
OLD SEWERS—			\$25,048.70
Pay rolls.....	\$6,549.92		
Brick.....	347.85		
Cement.....	223.45		
Lumber and other materials.....	973.94		
STRAIGHTENING BASSETT'S CREEK—			\$8,095.16
Labor.....	\$3,161.46		
Cement.....	284.00		
Masonry.....	1,118.28		
L. A. Condit. descriptions.....	23.91		
Sundries.....	142.32		
WIDENING WASHINGTON AVENUE BRIDGE OVER BASSETT'S CREEK—			\$4,729.97
Contract R. M. Douglass.....	\$3,289.26		
Labor, extra.....	295.75		
Sand.....	31.24		
SUNDRY PAVING—			\$3,616.25
Labor.....	\$2,538.84		
Material.....	639.58		
STREET OPENINGS—			\$3,178.42
Street openings.....	\$93,599.56		
L. A. Condit. descriptions.....	179.59		
Interest on awards.....	98.10		
TAXES REFUNDED—			\$93,871.25
Sewer, curb and gutter, paving tax refunded.....			\$10,719.85
SUNDRIES—			
Street signs.....			\$81.25
M. Voliski, judgment vs. city, for stone taken from 13th avenue N. E.....			932.92
Franklin avenue bridge.....			30,487.43
Lyndale avenue bridge.....			29,766.78
North Minneapolis police station, lot 4, block 34, Case, et al's addition to Minneapolis.....			2,000.00
Grading University avenue S. E., labor.....			3,000.00
Grading East Lake street, labor.....			3,000.00
Steel arch bridge, lamp posts for electric lights.....			609.90
FIRE DEPARTMENT PROPERTY ACCOUNT—			
Hose house, Harrison street N. E., plumbing, heating.....	\$673.96		
" " " balance plumbing.....	300.00		
" " " final estimate on building.....	2,910.90		
Tapping water main, north 4th street lot.....	15.84		
Part lot 1, block 10, Maben, et al addition, for hose house.....	1,400.00		
Viaducts and railroad crossings, sundries.....			\$5,300.70
Refunded to Jas. Pauly, constructing sewer on bridge square in 1883.....			\$96.87
Engineer's certificates, permanent improvement fund.....			360.50
Sidewalk repairs and re-assessments, season 1888.....			3,656.16
Bridge over east channel, Mississippi River, Alexander McCallum, contractor.....			4,583.58
Crematory building.....			4,894.18
Site Soldiers' Home, authorized by act of legislature, pledge of city council.....			5,000.00
Return of amount advanced to build 5th avenue north bridge.....			55,000.00
City's share of the sewer, paving, curb and gutter improvements for the season of 1889.....			2,500.00
Sewer construction.....	\$241,681.71		
Paving.....	26,583.91		
Curb and gutter.....	1,755.06		
			\$270,030.68
Total disbursements.....			\$594,830.27

Recapitulation.

January 1, 1890, by receipts for twelve months.....		\$684,090.49
January 1, 1889, to balance overdrawn.....	\$14,379.41	
January 1, 1890, to disbursements for twelve months.....	594,830.27	609,409.68
January 1, 1890, by balance on hand.....		\$74,680.81

WATER WORKS FUND.

RECEIPTS AND DISBURSEMENTS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1889.

HOW CREATED.

By special assessment of 65 cents per lineal front foot on each side of the street for water main: also the water rentals.

Revenue for 1890.

Special assessment 1889 for 1890.....	\$102,825.34
Estimated water revenue.....	165,000.00
	\$267,825.34

WATER WORKS.

RECEIPTS—		
January water receipts.....	\$2,759.38	
February " ".....	4,838.93	
March " ".....	3,223.65	
April " ".....	1,069.15	
May " ".....	51,953.47	
June " ".....	12,400.13	
July " ".....	8,545.60	
August " ".....	10,294.81	
September " ".....	1,359.89	
October " ".....	32,372.06	
November " ".....	20,937.86	
December " ".....	7,759.29	
		\$157,514.22
TAXES—		
March settlement from county treasurer.....	\$9,491.56	
June " " " ".....	92,567.21	
November " " " ".....	1,809.75	
		\$103,868.52
ADVANCES—		
Money advanced by S. D. Works for water main.....	\$785.00	
" " " Board of Education for water main.....	1,934.10	
" " " W. A. Barnes & Co. " " " ".....	167.90	
" " " C. E. Cottrell & Co. " " " ".....	1,600.00	
		\$4,687.00
The above to be refunded when the taxes have been collected.		
SUNDRIES—		
Unclaimed balances on pay rolls.....	\$83.40	
Refund on pay rolls, Andrew Bergstrom.....	71.73	
Refund on warrant No. 43,372, order Albert Norey.....	37.70	
Minneapolis Street R'y Co., expense of relaying water main....	900.22	
W. A. Barnes & Co., expense of relaying water main.....	14.86	
		\$1,107.91
Total receipts.....		\$267,177.65

Disbursements.

CONSTRUCTION—		
New water mains, labor and material.....	\$118,570.24	
North Minneapolis pumping station.....	38,804.07	
Water meters.....	3,286.25	
		\$155,660.56
TAXES—		
Taxes annulled, engineer's certificates.....	\$36,540.01	
Taxes refunded.....	14,826.79	
Refund amount advanced for water mains.....	3,534.30	
		\$54,901.10
CURRENT EXPENSES—		
General running expenses.....	\$62,631.31	
Incidentals.....	6,201.51	
		\$68,832.82
Total disbursements.....		\$279,394.48

Recapitulation.

January 1, 1889, by balance on hand.....	\$79,558.42
" 1, 1890, by receipts for twelve months.....	267,177.65
	\$346,736.07
January 1, 1890, to disbursements for twelve months.....	279,394.48
" 1, 1890, by balance on hand.....	\$61,341.59

WARD FUNDS.

RECEIPTS AND DISBURSEMENTS OF THE THIRTEEN WARDS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1889.

HOW CREATED.

"A tax not to exceed 2½ mills shall be annually levied upon all the taxable property of each ward sufficient to defray all the expenses of the ward for the next fiscal year, including the grading of streets."

Sprinkling tax, special assessment per front foot.

Sidewalk tax, special assessment per front foot.

WARD.	RATE STREET TAX.	STREET MILL TAX.	SIDEWALK SPECIAL TAX.	SPRINKLING SPECIAL TAX.	TOTAL WARD FUNDS.
1.....	2.1-10 Mills	\$8,453.36	\$25,344.30	\$5,900.74	\$39,698.40
2.....	1.5-10 "	11,993.68	20,555.44	6,779.62	39,328.74
3.....	2. " "	24,091.51	34,707.67	12,079.39	70,878.57
4.....	1. " "	36,983.17	19,685.04	12,740.56	69,408.77
5.....	6-10 "	14,452.34	44,564.53	15,815.34	74,832.21
6.....	2.1-10 "	9,045.49	19,511.73	5,580.75	34,137.95
7.....	2. " "	10,486.97	5,824.93	5,159.97	21,471.87
8.....	2.1-10 "	24,470.35	28,011.05	11,923.83	64,405.23
9.....	2. " "	9,042.93	21,358.93	3,660.93	34,062.79
10.....	2.1-10 "	8,044.48	2,506.32	737.50	11,288.30
11.....	2. " "	8,291.63	17,732.49	8,959.52	34,983.64
12.....	2.1-10 "	6,919.11	8,830.71	138.32	15,888.14
13.....	2.1-10 "	10,747.99	1,414.92	141.04	12,303.95
Total.....		\$183,023.01	\$250,048.06	\$89,617.47	\$522,688.56

FIRST WARD STREET FUND.

Credits.

By taxes, March settlement.....	\$1,743.22
By taxes, June settlement.....	5,928.82
By taxes, November settlement.....	175.22
By warrants cancelled.....	\$7,847.26
By earth sold.....	7.59
By error in pay roll.....	129.10
By amount unclaimed on pay rolls.....	3.00
	18.87
Total credits.....	\$8,005.82

Debits.

To debit balance January 1, 1889.....	\$314.10
To labor.....	3,220.18
To tools and nails.....	47.26
To lumber for cross walks and culverts.....	284.79
To repairing tools.....	46.25
To sundries.....	25.25
To interest paid on advances.....	34.00
To loan from sidewalk fund, returned.....	3,800.00
Total debits.....	\$7,771.83
Credit balance.....	\$233.99

CITY OF MINNEAPOLIS.

FIRST WARD SIDEWALK FUND.

Credits.

By loans to street fund returned.....		\$3,800.00
By taxes, March settlement.....	\$2,518.11	
By taxes, June settlement.....	7,690.85	
By taxes, November settlement.....	251.25	
		\$10,469.21
By warrants cancelled.....	\$30.00	
By error in refund of sidewalk tax.....	90.36	
By sidewalk repairs and re-assessment, season 1889.....	191.46	
Total credits.....		\$14,581.03

Debits.

To debit balance, January 1, 1889.....	\$871.32	
To labor.....	15.28	
To hardware and nails.....	5.70	
To lumber.....	89.12	
To laying stone sidewalks.....	525.95	
To repairing sidewalks.....	6.90	
To sidewalk taxes refunded.....	4,760.86	
To taxes annulled, engineer certificates.....	8,245.04	
To sundries.....	1.50	
To L. A. Condit, county auditor, descriptions.....	5.34	
Total debits.....		\$14,527.01
Credit balance.....		\$54.02

FIRST WARD SPRINKLING FUND.

Credits.

By taxes, March settlement.....	\$328.29	
By taxes, June settlement.....	3,327.03	
By taxes, November settlement.....	98.11	
Total credits.....		\$3,753.43

Debits.

To debit balance, January 1, 1889.....	\$285.35	
To labor.....	3,336.00	
To taxes refunded.....	3.00	
To taxes annulled, engineer certificates.....	114.61	
To L. A. Condit, county auditor, descriptions.....	14.68	
Total debits.....		\$3,753.64
Debit balance.....	\$0.21	

SECOND WARD STREET FUND.

Credits.

By credit balance, January 1, 1889.....		\$2,560.95
By taxes, March settlement.....	\$1,831.89	
By taxes, June settlement.....	8,060.04	
By taxes, November settlement.....	357.29	
		\$10,249.22
By earth sold.....		\$163.00
By labor on bridges.....		22.55
By error in pay rolls.....		50
Total credits.....		\$12,906.22

Debits.

To labor.....	\$7,197.16	
To grading.....	4,391.36	
To street sweeper.....	421.15	
To street sweeper repairs.....	83.50	
To hardware and tools.....	33.37	
To repairing tools.....	37.74	
To lumber, cross walks and culverts.....	261.00	
To sundries.....	4.75	
Total debits.....		\$12,430.03
Credit balance.....		\$566.19

SECOND WARD SIDEWALK FUND.

Credits.

By credit balance January 1, 1889.....		\$2,003.92
By taxes, March settlement.....	\$919.23	
By taxes, June settlement.....	4,847.36	
By taxes, November settlement.....	551.38	
		\$6,317.97
By warrants cancelled.....		1.35
By errors in refund of sidewalk tax.....		56.33
By sidewalk repairs and reassessment, season 1889.....		603.35
Total credits.....		\$8,982.92

Debits.

To labor.....	\$220.10	
To nails and tools.....	65.35	
To laying brick sidewalks.....	193.30	
To laying wood sidewalks.....	65.83	
To laying stone sidewalks.....	48.73	
To lumber.....	886.36	
To sidewalk tax refunded.....	4,237.05	
To sidewalk tax annulled, engineer's certificates.....	3,163.07	
To L. A. Condit, county auditor, descriptions.....	5.52	
To sundries.....	1.50	
Total debits.....		\$8,886.81
Credit balance.....		\$96.11

SECOND WARD STREET SPRINKLING FUND.

Credits.

By credit balance January 1, 1889.....		\$443.68
By taxes, March settlement.....	\$254.39	
By taxes, June settlement.....	6,100.94	
By taxes, November settlement.....	105.42	
Total credits.....		\$6,904.43

Debits.

To labor.....	\$4,921.50	
To tax refunded.....	439.30	
To tax annulled, engineer's certificates.....	673.07	
To L. A. Condit, county auditor, descriptions.....	23.34	
Total debits.....		\$6,056.21
Credit balance.....		\$848.22

THIRD WARD STREET FUND.

Credits.

By taxes, March settlement.....	\$3,897.02	
By taxes, June settlement.....	17,832.28	
By taxes, November settlement.....	541.56	
		\$22,270.86
By earth sold and repairing of plow.....		184.76
By warrants cancelled.....		3.00
By amount unclaimed on pay rolls.....		13.61
Total credits.....		\$22,472.23

Debits.

To debit balance, January 1, 1889.....	\$262.05	
To loan from sidewalk fund returned.....	1,000.00	
To advance for grading refunded.....	15.00	
To labor.....	15,060.64	
To hardware and tools.....	129.81	
To graders and scrapers.....	345.00	
To repairing tools.....	290.72	
To lumber for crosswalks and culverts.....	628.54	
To dirt.....	354.05	
To rent of room for storage of tools, seasons 1888, 1889.....	45.00	
To insurance on tools, seasons 1889, 1890.....	6.75	
To sundries.....	1.90	
Total debits.....		\$18,139.46
Credit balance.....		\$4,332.77

CITY OF MINNEAPOLIS.

THIRD WARD SIDEWALK FUND.

Credits.

By loan to street fund returned		\$1,000.00
By loan to sprinkling fund returned.....		800.00
By taxes, March settlement.....	\$1,627.54	
By taxes, June settlement.....	14,943.57	
By taxes, November settlement.....	697.86	
		\$17,268.97
By repairing sidewalks.....		4.64
By warrants cancelled.....		16.13
By error in charge of engineer certificates.....		231.86
By repairing sidewalks and re-assessments, season 1889.....		1,013.31
Total credits.....		\$20,334.91

Debits.

To debit balance, January 1, 1889.....	\$55.40	
To labor.....	790.43	
To hardware and tools.....	209.90	
To laying and repairing wood sidewalk.....	361.67	
To laying and repairing stone sidewalk.....	184.14	
To lumber.....	4,072.56	
To sidewalk tax refunded.....	4,229.48	
To sidewalk tax annulled, engineer's certificates.....	11,154.35	
To L. A. Condit, county auditor, descriptions.....	25.89	
Total debits.....		\$21,083.82
Debit balance.....	\$748.91	

THIRD WARD STREET SPRINKLING FUND.

Credits.

By taxes March settlement.....	\$560.17	
By taxes June settlement.....	8,423.22	
By taxes November settlement.....	230.79	
Total credit.....		\$9,214.18

Debits.

To debit balance January 1, 1889.....	\$227.43	
To loan from sidewalk fund returned.....	800.00	
To labor.....	5,093.30	
To hardware and tools.....	42.50	
To balance due on sprinklers.....	414.00	
To sprinkler repairs.....	10.50	
To tax refunded.....	143.37	
To tax annulled, engineer's certificates.....	183.44	
To L. A. Condit, county auditor, descriptions.....	38.02	
Total debits.....		\$6,952.56
Credit balance.....		\$2,261.62

FOURTH WARD STREET FUND.

Credits.

By credit balance January 1, 1889.....		\$820.24
By amount borrowed from sidewalk fund.....		500.00
By taxes March settlement.....	\$6,252.07	
By taxes June settlement.....	15,454.36	
By taxes November settlement.....	381.88	
		22,087.81
By earth sold.....		9.00
By advances and bonus for grading.....		2,263.41
By warrants cancelled.....		10.75
By errors in pay rolls.....		1.75
By amount unclaimed on pay rolls.....		16.21

Total credits..... \$25,718.17

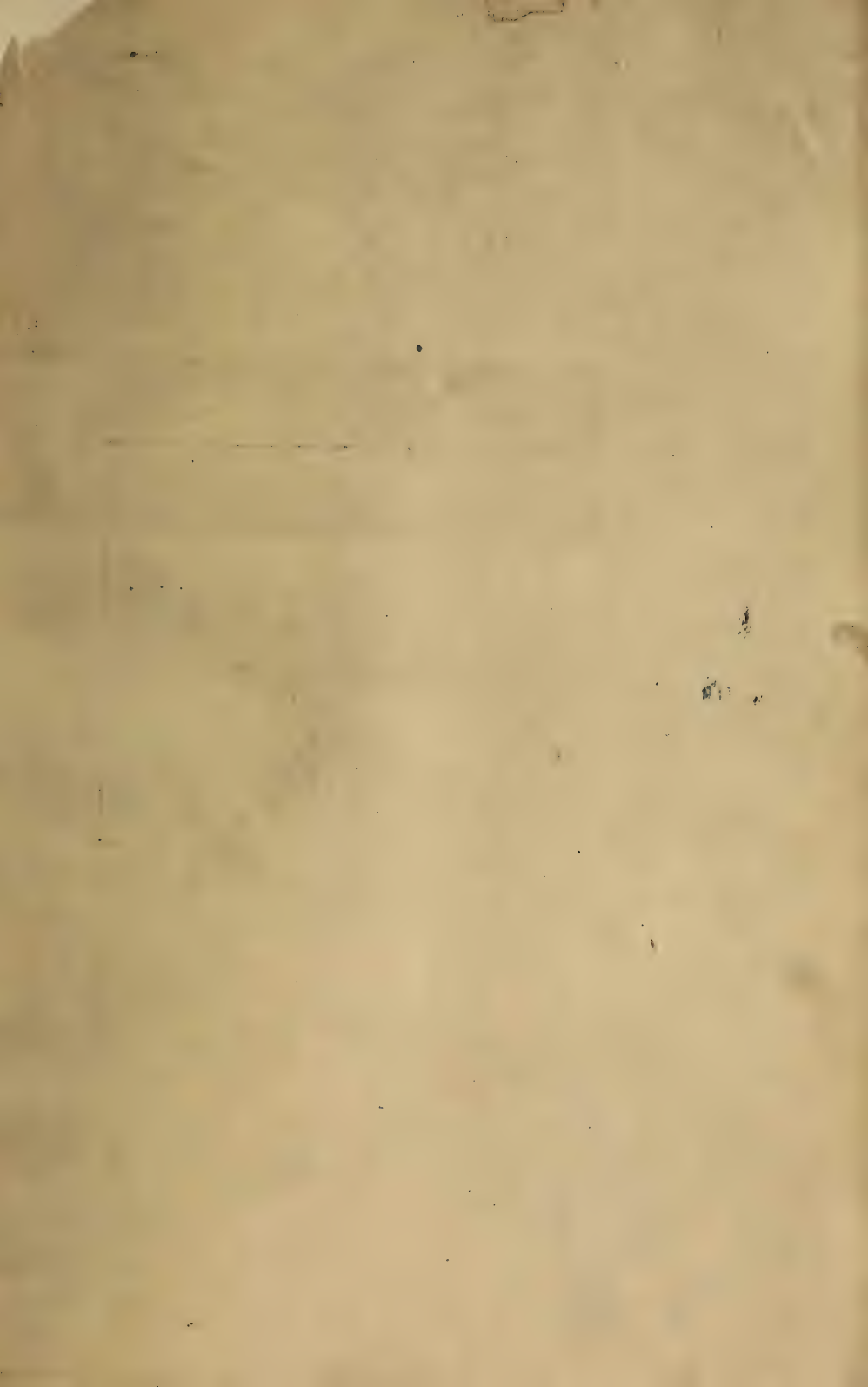
Debits.

To loans from sidewalk fund returned.....	\$4,400.00	
To labor.....	22,261.12	
To hardware and tools.....	262.11	
To repairing tools.....	71.94	
To lumber, cross-walks and culverts.....	293.79	
To two O'Neil street sweepers.....	811.36	
To street sweeper repairs.....	396.50	
To grading.....	1,217.20	
To dirt.....	123.36	
To sundries.....	37.85	

Total debits..... \$29,875.23

*Debit balance..... \$4,157.06

*The warrants for the overdraft in the above account have not been countersigned; consequently the money for the amount of the overdraft has not been paid by the city treasurer, as will be seen by the treasurer's statement of this account.



FOURTH WARD SIDEWALK FUND.

Credits.

By credit balance, January 1, 1889.....		\$1,682.78
By loans to street fund returned.....		4,400.00
By taxes, March settlement.....	\$2,156.36	
By taxes, June settlement.....	28,111.52	
By taxes, November settlement.....	2,707.70	
By warrants cancelled.....		\$32,975.58
By error in charge of engineer certificates.....		29.58
By sidewalk repairs and reassessments, season 1888.....		421.81
		265.54
Total credits.....		\$39,775.29

Debits.

To loan from street fund returned.....	\$500.00	
To labor.....	513.85	
To hardware and tools.....	107.65	
To lumber.....	1,867.36	
To laying and repairing wood sidewalks.....	113.21	
To laying and repairing stone sidewalk.....	949.51	
To sidewalk tax refunded.....	9,380.11	
To sidewalk tax annulled, engineer's certificates.....	23,907.75	
To sundries.....	12.00	
To L. A. Condit, county auditor, descriptions.....	8.76	
Total debits.....		\$37,360.20
Credit balance.....		\$2,415.09

FOURTH WARD STREET SPRINKLING FUND.

Credits.

By credit balance January 1, 1889.....		\$51.39
By taxes, March settlement.....	\$1,025.43	
By taxes, June settlement.....	13,621.26	
By taxes, November settlement.....	315.05	
Total credits.....		\$15,013.13

Debits.

To labor.....	\$10,556.25	
To Oak Lake Improvement Association.....	700.00	
To Hawthorn Park Improvement Association.....	1,633.84	
To tax refunded.....	150.29	
To tax annulled, engineer's certificates.....	350.59	
To sundries.....	50	
To L. A. Condit, county auditor, descriptions.....	60.90	
Total debits.....		\$13,452.37
Credit balance.....		\$1,560.76

FIFTH WARD STREET FUND.

Credits.

By credit balance, January 1, 1889.....		\$3,202.09
By loan to sixth ward street fund returned.....		750.00
By taxes, March settlement.....	\$2,239.65	
By taxes, June settlement.....	9,259.45	
By taxes, November settlement.....	162.98	
By warrants cancelled.....		\$11,662.08
By repairing cross walks.....		23.66
By error in pay rolls.....		10.00
By Minneapolis Street Railway Co., grading.....		28.44
By amount unclaimed on pay rolls.....		298.23
		45.15
Total credits.....		\$36,017.65

Debits.

To labor.....	\$10,944.48	
To Hardware and tools.....	128.90	
To repairing tools.....	59.40	
To lumber for cross walks and culverts.....	248.11	
To one O'Neill patent street sweeper.....	441.15	
To repairs to street sweeper.....	257.47	
To one road worker.....	100.00	
To grading.....	263.40	
To damages opening 1st avenue south.....	500.00	
To Sundries.....	13.20	
Total debits.....		\$12,956.11
Credit balance.....		\$3,061.54

FIFTH WARD SIDEWALK FUND.

<i>Credits.</i>		
By taxes, March settlement.....	\$3,058.55	
By taxes, June settlement.....	64,078.78	
By taxes, November settlement.....	558.57	
		\$67,695.90
By warrants cancelled.....		11.95
By repairing sidewalk.....		16.20
By Minneapolis Street Railway Co., sidewalk repairing.....		42.00
By error in charge, engineer certificates.....		72.03
By sidewalk repairs and re-assessments, season 1889.....		754.16
Total credits.....		\$68,592.24
<i>Debits.</i>		
To debit balance January 1, 1889.....	\$1,396.19	
To labor.....	925.22	
To hardware and tools.....	101.90	
To lumber.....	2,208.00	
To laying wood sidewalk.....	160.69	
To laying stone sidewalk.....	827.37	
To sidewalk tax refunded.....	4,695.26	
To sidewalk tax annulled, engineer certificates.....	58,951.90	
To sundries.....	14.50	
To L. A. Condit, county auditor, descriptions.....	29.96	
Total debit.....		\$69,310.99
Debit balance.....	\$718.75	

FIFTH WARD STREET SPRINKLING FUND.

<i>Credits.</i>		
By credit balance January 1, 1889.....		\$5,194.02
By taxes, March settlement.....	\$763.68	
By taxes, June settlement.....	8,224.17	
By taxes, November settlement.....	135.79	
		\$9,123.64
By error in pay roll.....		88.67
Total credits.....		\$14,406.33
<i>Debits.</i>		
To labor.....	\$12,888.73	
To Portland Avenue Improvement Association.....	49.35	
To taxes refunded.....	185.41	
To taxes annulled, engineer's certificates.....	263.58	
To sundries.....	10.38	
To L. A. Condit, county auditor, descriptions.....	66.06	
Total debits.....		\$13,463.51
Credit balance.....		\$942.82

SIXTH WARD STREET FUND.

<i>Credits.</i>		
By taxes, March settlement.....	\$1,450.56	
By taxes, June settlement.....	6,891.52	
By taxes, November settlement.....	258.83	
		\$8,600.91
By warrants cancelled.....		9.60
By amounts unclaimed on pay rolls.....		.82
Total credits.....		\$8,611.33
<i>Debits.</i>		
To debit balance January 1, 1889.....	\$84.41	
To loan from fifth ward street fund returned.....	750.00	
To loans from sidewalk fund returned.....	1,400.00	
To labor.....	5,930.80	
To hardware and tools.....	16.00	
To lumber for crosswalks and culverts.....	88.13	
Total debits.....		\$8,269.34
Credit balance.....		\$341.99

SIXTH WARD SIDEWALK FUND.

Credits.

By credit balance January 1, 1889.....		\$269.62
By loans to street fund returned.....		1,400.00
By taxes March settlement.....	\$659.35	
By taxes June settlement.....	16,321.63	
By taxes November settlement.....	669.98	
		<hr/>
By warrants cancelled.....		17,650.96
By error in charge of engineer's certificates.....		14.85
By sidewalk repairs and re-assessments season 1889.....		153.93
By advance for repairing sidewalk.....		344.15
		<hr/>
Total credits.....		\$19,842.61

Debits.

To labor.....	\$236.68	
To hardware and tools.....	106.10	
To lumber.....	2,542.13	
To laying wood sidewalk.....	152.56	
To laying stone sidewalk.....	154.63	
To sidewalk tax refunded.....	1,882.64	
To sidewalk tax annulled, engineer's certificates.....	12,510.92	
To L. A. Condit, county auditor, descriptions.....	11.82	
		<hr/>
Total debits.....		\$17,597.48
Credit balance.....		<hr/>
		\$2,245.13

SIXTH WARD STREET SPRINKLING FUND.

Credits.

By taxes March settlement.....	\$326.50	
By taxes June settlement.....	4,456.12	
By taxes November settlement.....	130.92	
		<hr/>
Total credits.....		\$4,913.54
		<hr/>
		<i>Debits.</i>
To debit balance January 1, 1889.....	\$34.44	
To labor.....	4,327.75	
To taxes annulled, engineer's certificates.....	17.74	
To L. A. Condit, county auditor, descriptions.....	21.43	
		<hr/>
Total debits.....		\$4,401.36
Credit balance.....		<hr/>
		\$512.18

SEVENTH WARD STREET FUND.

Credits.

By credit balance, January 1, 1889.....		\$106.10
By taxes, March settlement.....	\$1,593.30	
By taxes, June settlement.....	7,958.99	
By taxes, November settlement.....	446.49	
		<hr/>
By earth sold.....		\$9,998.78
By lumber sold.....		487.90
By warrants cancelled.....		6.00
By advances for grading.....		4.50
By amount unclaimed on pay rolls.....		112.00
		<hr/>
Total receipts.....		\$10,716.90

Debits.

To loan to sidewalk fund returned.....	\$2,250.00	
To labor.....	8,232.23	
To hardware and tools.....	78.51	
To repairing tools.....	33.65	
To lumber for cross walks and culverts.....	279.24	
		<hr/>
Total debits.....		\$10,873.63
Debit balance.....	\$156.73	

CITY OF MINNEAPOLIS.

SEVENTH WARD SIDEWALK FUND.

<i>Credits.</i>		
By credit balance, January 1, 1889		\$2,219.48
By loans to street fund returned		2,250.00
By taxes, March settlement	\$1,622.66	
By taxes, June settlement	1,630.87	
By taxes, November settlement	21.00	
		\$3,283.53
By warrants cancelled		8.97
By error in charge of engineer certificates		114.89
By sidewalk repairs and re-assessments, season 1889		196.13
Total credits		\$8,073.00
<i>Debits.</i>		
To labor	\$118.78	
To hardware and tools	71.65	
To lumber	1,176.13	
To laying wood sidewalk	131.16	
To sidewalk tax refunded	3,345.33	
To sidewalk tax annulled, engineer's certificates	1,181.64	
To sundries	6.00	
To L. A. Condit, county auditor, descriptions	.18	
Total debits		\$6,030.87
Credit balance		\$2,042.13

SEVENTH WARD STREET SPRINKLING FUND.

<i>Credits.</i>		
By credit balance January 1, 1889		\$140.91
By taxes, March settlement	\$38.90	
By taxes, June settlement	1,077.38	
By taxes, November settlement	57.70	
Total credits		\$1,173.98
<i>Debits.</i>		
To labor	\$1,139.00	
To taxes refunded	28.29	
To taxes annulled, engineer's certificates	104.58	
To L. A. Condit, county auditor, descriptions	6.02	
Total debits		\$1,277.89
Credit balance		\$37.00

EIGHTH WARD STREET FUND.

<i>Credits.</i>		
By credit balance January 1, 1889		\$14,781.80
By taxes, March settlement	\$2,828.80	
By taxes, June settlement	17,236.61	
By taxes, November settlement	854.94	
		\$20,920.35
By earth sold		1,116.50
By donation for grading		50.00
By warrants canceled		19.50
By error in pay rolls		1.60
By amount unclaimed on pay rolls		16.33
Total credits		\$36,906.08
<i>Debits.</i>		
To loan from sidewalk fund returned	\$400.00	
To loan from sprinkling fund returned	1,000.00	
To labor	8,619.60	
To hardware and tools	107.97	
To repairing tools	36.55	
To lumber for crosswalks and culverts	390.60	
To grading	26,615.30	
To use of cars	150.00	
To sundries	3.75	
Total debits		\$37,323.77
Debit balance		\$417.69

EIGHTH WARD SIDEWALK FUND.

Credits.

By credit balance January 1, 1889.....		\$2,573.23
By loan to street fund returned.....		400.00
By taxes, March settlement.....	\$2,048.40	
By taxes, June settlement.....	11,945.53	
By taxes, November settlement.....	472.02	
		<hr/>
By warrants cancelled.....		\$14,465.95
By error in charge of engineer's certificates.....		3.00
By sidewalk repairs and reassessments, season 1889.....		48.72
		425.24
		<hr/>
Total credits.....		\$17,916.14

Debits.

To labor.....	\$618.08	
To hardware and tools.....	172.52	
To lumber.....	2,751.97	
To laying sidewalk.....	49.14	
To sidewalk tax refunded.....	5,905.37	
To sidewalk tax annulled, engineer's certificates.....	4,877.10	
To sundries.....	8.50	
To L. A. Condit, county auditor, descriptions.....	16.38	
		<hr/>
Total debits.....		\$14,390.06
Credit balance.....		<hr/>
		\$3,517.08

EIGHTH WARD STREET SPRINKLING FUND.

Credits.

By credit balance January 1, 1889.....		\$113.39
By loan to street fund returned.....		1,000.00
By taxes March settlement.....	\$525.45	
By taxes June settlement.....	8,111.73	
By taxes November settlement.....	381.42	
		<hr/>
Total credits.....		\$9,018.60
		<hr/>
Total credits.....		\$10,131.99

Debits.

To labor.....	\$7,352.50	
To Portland Avenue Improvement association.....	266.18	
To taxes refunded.....	51.95	
To taxes annulled, engineer's certificates.....	140.37	
To L. A. Condit, county auditor, descriptions.....	59.00	
		<hr/>
Total debits.....		\$7,870.00
Credit balance.....		<hr/>
		\$2,261.99

NINTH WARD STREET FUND.

Credits.

By credit balance January 1, 1889.....		\$725.72
By taxes, March settlement.....	\$942.54	
By taxes, June settlement.....	7,181.29	
By taxes, November settlement.....	271.51	
		<hr/>
By earth sold.....		\$8,395.34
By rock sold.....		327.55
By amount unclaimed on pay rolls.....		25.00
		1.50
		<hr/>
Total credits.....		\$9,474.91

Debits.

To loans from sidewalk fund returned.....	\$800.00	
To labor.....	6,886.64	
To hardware and tools.....	31.21	
To repairing tools.....	27.10	
To lumber for cross-walks and culverts.....	156.08	
To rock.....	13.38	
To road machine.....	265.00	
To sundries.....	2.00	
		<hr/>
Total debits.....		\$8,181.41
Credit balance.....		<hr/>
		\$1,293.50

CITY OF MINNEAPOLIS.

NINTH WARD SIDEWALK FUND.

Credits.

By credit balance January 1, 1889.....		\$1,141.09
By loan to street fund returned.....		800.00
By taxes March settlement.....	\$425.40	
By taxes June settlement.....	6,544.94	
By taxes November settlement.....	352.10	
		<hr/>
By sidewalk repairs and re-assessments, season 1889.....		\$7,322.44
		239.71
		<hr/>
Total credits.....		\$9,503.24

Debits.

To labor.....	\$201.53	
To hardware and tools.....	112.95	
To lumber.....	2,732.69	
To laying wood sidewalk.....	239.44	
To laying stone sidewalk.....	53.46	
To tax refunded.....	813.50	
To tax annulled, engineer's certificates.....	3,894.01	
To sundries.....	3.00	
To L. A. Condit, county auditor, descriptions.....	49.22	
		<hr/>
Total debits.....		\$8,090.80
Credit balance.....		<hr/>
		\$1,412.44

NINTH WARD STREET SPRINKLING FUND.

Credits.

By taxes, March settlement.....	46.46	
By taxes, June settlement.....	2,281.94	
By taxes, November settlement.....	237.85	
		<hr/>
Total credits.....		\$2,566.25

Debits.

To debit balance, January 1, 1889.....	\$461.56	
To labor.....	1,674.00	
To taxes refunded.....	17.73	
To taxes annulled, engineer certificates.....	63.02	
To L. A. Condit, county auditor, descriptions.....	13.24	
		<hr/>
Total debits.....		\$2,229.55
Credit balance.....		<hr/>
		\$336.70

TENTH WARD STREET FUND.

Credits.

By taxes, March settlement.....	\$1,343.40	
By taxes, June settlement.....	5,339.25	
By taxes, November settlement.....	275.54	
		<hr/>
By loan to E. H. Moulton, city treasurer, returned.....		\$6,958.19
By warrants cancelled.....		1,036.66
By earth sold.....		35.15
By rock sold.....		185.46
By amount advanced by V. Reeves <i>et al</i> for grading.....		2.45
By amount unclaimed on pay rolls.....		1,000.00
		15.00
		<hr/>
Total credits.....		\$9,232.91

Debits.

To debit balance January 1, 1889.....	\$873.42	
To loan from E. H. Moulton, city treasurer, returned.....	1,080.55	
To amount advanced for grading by E. B. Ames, returned.....	3,000.00	
To amount advanced for grading by R. Farnham, returned.....	1,000.00	
To labor.....	2,724.74	
To hardware and tools.....	42.45	
To repairing tools.....	19.30	
To lumber.....	87.41	
To scrapers.....	100.00	
		<hr/>
Total debits.....		\$8,927.87
Credit balance.....		<hr/>
		\$305.04

TENTH WARD SIDEWALK FUND.

Credits.

By credit balance January 1, 1889.....		\$49.22
By taxes, March settlement.....	\$66.43	
By taxes, June settlement.....	36.66	
	<hr/>	\$103.09
Total credit.....		\$152.31

Debits.

To sidewalk tax refunded.....	\$11.93	
To L. A. Condit, county auditor, descriptions.....	1.50	
	<hr/>	\$13.43
Total debits.....		\$13.43
Credit balance.....		\$138.88

TENTH WARD STREET SPRINKLING FUND.

Credits.

By credit balance, January 1, 1889.....		\$29.50
By taxes, March settlement.....	\$23.35	
By taxes, June settlement.....	557.48	
By taxes, November settlement.....	12.61	
	<hr/>	\$593.44
Total credits.....		\$622.94

Debits.

To labor.....	\$603.00	
To L. A. Condit, county auditor, descriptions.....	3.22	
	<hr/>	\$606.22
Total debits.....		\$606.22
Credit balance.....		\$16.72

ELEVENTH WARD STREET FUND.

Credits.

By credit balance January 1, 1889.....		\$186.35
By taxes, March settlement.....	\$1,076.04	
By taxes, June settlement.....	6,107.83	
By taxes, November settlement.....	360.43	
	<hr/>	\$7,544.30
By amount unclaimed on pay rolls.....		4.95
Total credits.....		\$7,735.60

Debits.

To labor.....	\$6,888.60	
To hardware and tools.....	69.04	
To repairing tools.....	72.20	
To lumber for cross walks and culverts.....	361.63	
	<hr/>	\$7,391.56
Total debits.....		\$7,391.56
Credit balance.....		\$344.04

ELEVENTH WARD SIDEWALK FUND.

Credits.

By credit balance January 1, 1889.....		\$442.45
By taxes, March settlement.....	\$800.39	
By taxes, June settlement.....	15,232.98	
By taxes, November settlement.....	650.01	
	<hr/>	\$16,683.38
By sidewalk repairs and re-assessments, season 1889.....		550.53
Total credits.....		\$17,676.36

Debits.

To labor.....	\$684.81	
To hardware and tools.....	142.60	
To lumber.....	3,293.98	
To brick.....	64.00	
To laying sidewalk.....	248.51	
To tool repair cart.....	20.00	
To sidewalk tax refunded.....	3,256.28	
To sidewalk tax annulled, engineer's certificates.....	10,550.46	
To sundries.....	4.50	
To L. A. Condit, county auditor, descriptions.....	4.65	
	<hr/>	\$18,269.79
Total debits.....		\$18,269.79
Debit balance.....	\$593.43	

ELEVENTH WARD STREET SPRINKLING FUND.

<i>Credits.</i>		
By credit balance January 1, 1889.....		\$719.90
By taxes March settlement.....	\$193.40	
By taxes June settlement.....	2,801.03	
By taxes November settlement.....	118.93	
Total credits.....		\$3,113.36
<i>Debits.</i>		
To labor.....	\$3,635.45	
To taxes refunded.....	26.78	
To taxes annulled, engineer's certificates.....	41.47	
To L. A. Condit, county auditor, descriptions.....	15.96	
Total debits.....		\$3,719.66
Credit balance.....		\$113.60

TWELFTH WARD STREET FUND.

<i>Credits.</i>		
By credit balance, January 1, 1889.....		\$161.38
By taxes, March settlement.....	\$510.56	
By taxes, June settlement.....	5,068.47	
By taxes, November settlement.....	210.63	
By earth sold.....		\$5,789.66
By amount unclaimed on pay rolls.....		\$467.57
Total credits.....		\$11,718.60
<i>Debits.</i>		
To labor.....	\$5,752.28	
To hardware and tools.....	33.66	
To repairing tools.....	16.20	
To lumber for cross walks and culverts.....	164.46	
To Sundries.....	11.58	
Total debits.....		\$5,978.18
Credit balance.....		\$442.18

TWELFTH WARD SIDEWALK FUND.

<i>Credits.</i>		
By credit balance January 1, 1889.....		\$91.54
By taxes, March settlement.....	\$110.11	
By taxes, June settlement.....	979.12	
By taxes, November settlement.....	100.49	
Total credits.....		\$1,181.26
<i>Debits.</i>		
To labor.....	\$91.39	
To hardware and tools.....	25.65	
To lumber.....	368.59	
To tax refunded.....	406.09	
To tax annulled, engineer's certificates.....	485.75	
To sundries.....	1.50	
To L. A. Condit, county auditor, descriptions.....	.12	
Total debits.....		\$1,379.09
Debit balance.....	\$97.83	

THIRTEENTH WARD STREET FUND.

Credits.

By credit balance January 1, 1889.....		\$1,130.41
By taxes, March settlement.....	\$415.48	
By taxes, June settlement.....	2,649.55	
By taxes, November settlement.....	137.20	
	<hr/>	\$3,202.23
By amount unclaimed on pay rolls.....		8.48
Total credits.....		<hr/> \$4,341.12

Debits.

To labor.....	\$3,558.46	
To hardware and tools.....	25.01	
To repairing tools.....	21.49	
To lumber.....	13.60	
To grading.....	110.50	
To gate at Lake Calhoun.....	16.88	
To use of tools.....	7.00	
	<hr/>	
Total debits.....		\$3,752.94
Credit balance.....		<hr/> \$588.46

THIRTEETH WARD SIDEWALK FUND.

Credits.

By credit balance January 1, 1889.....		\$222.30
By taxes, June settlement.....		369.60
		<hr/>
Credit balance.....		\$591.90

ANNUAL REPORT

OF THE

CITY TREASURER

OF THE

City of Minneapolis

For the Fiscal Year Ending December 31, 1889.

EDER H. MOULTON, - - - - Treasurer.

MINNEAPOLIS:
HARRISON & SMITH, PRINTERS.
1890.

CITY TREASURER'S DEPARTMENT.

EDER H. MOULTON,

City Treasurer.

JAMES B. MODISETTE.

Assistant Treasurer.

EDWARD A. CROSBY,

Teller.

JOHN F. SORENSEN.

Book-keeper.

REPORT OF THE CITY TREASURER

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1889.

MINNEAPOLIS, Minn., December 31st, 1889.

To the Honorable City Council of the City of Minneapolis:

GENTLEMEN—In compliance with section 21, chapter 3, of the city charter, I herewith submit statement, including the sinking fund, public library, city park and board of education, showing receipts and disbursements of my office for the fiscal year ending December 31st, 1889, also the condition of the several funds, together with other information and suggestions, which may be of interest.

Before my election to the office of city treasurer, it had been the policy of the city for some years to make all bonds required for different purposes bear interest at the rate of $4\frac{1}{2}$ per cent.

I took an early opportunity to urge the advantage to the city of lowering this rate to 4 per cent. This suggestion met with considerable opposition at the hands of the ways and means committee, the chief argument advanced against the change, being that a $4\frac{1}{2}$ per cent. bond commanded par or a slight premium, whereas, a 4 per cent bond would sell at a discount, which fact would reflect upon the credit of the city.

I explained to the committee, that a relatively higher price could be obtained for a 4 per cent. bond than for one bearing a higher rate of interest, and if $97\frac{1}{2}$ could be obtained for a 4 per cent. bond, the city was better off than if 106 were bid for a $4\frac{1}{2}$ per cent. bond, and could par be obtained, it would be equal to more than 108.

The chief reason I gave in recommending this course, was that nearly all large issues of bonds are bought by bankers and brokers to sell again. A banker finds it easier to re-sell a bond for par for which he has paid $97\frac{1}{2}$ than to dispose of one at 108 $\frac{1}{2}$ for which he gave 106, even if the rate of the bond were half of 1 per cent higher.

The ways and means committee adopted my recommendation, and subsequent sales have borne out my theory and shown the wisdom of the change.

Minneapolis 4 per cent. bonds have never sold below a price equal to a $4\frac{1}{2}$ per cent bond at par. The price has steadily advanced, and 104 has now been obtained. This price is equal to 113 for a $4\frac{1}{2}$ per cent. bond. No $4\frac{1}{2}$ per cent. security in this state has ever brought such a price; and if a comparison be made between the prices obtained for our 4 per cent. bonds and those obtained by communities issuing $4\frac{1}{2}$ per cents., the wisdom of the reduction will be evident.

I believe that the time has now come when Minneapolis should make her future issues of bonds at 3 $\frac{1}{2}$ per cent., and the chances of floating such a bond are just as good as when the reduction from $4\frac{1}{2}$ to 4 per cent. was made.

I am aware that the objection will be raised against this plan that it is an entirely new departure; that other western communities have never issued a bond with so low a rate of interest.

This argument counts for little. Some one city must take the initiative, and Minneapolis, which leads in so many things, may well be the leader in this.

It might be well in this connection to make the bonds run 35 or 40 years,

as Minneapolis has made a large amount of her bonds to mature about the same time. If the charter does not permit it, an act of the legislature could be obtained for that purpose.

I believe that Minneapolis could obtain 97½ or 98 for such a bond, and in the near future this price might approximate to par.

At this date there is in the sinking fund \$535,358.74. Of this amount \$118,358.74 is in bank certificates drawing 4 per cent. interest. Four hundred and seventeen thousand dollars of same is in bonds of the city of Minneapolis drawing interest as follows: \$260,000 at 4 per cent.; \$135,000 at 4½ per cent; and \$22,000 at 5 per cent. This fund is accumulating rapidly, and I would suggest that the bonds now held, or hereafter acquired, be registered in the name of the board of sinking fund commissioners, and that all securities of this fund be in the custody of the board of sinking fund commissioners instead of the city treasurer, as it is at present.

Respectfully submitted,

EDER. H. MOULTON,

City Treasurer.

SINKING FUND.

Securities in sinking fund January 1, 1890.....\$425,823.01.

Receipts.

From Taxes.....		\$119,960.73
Interest.....		17,575.00

Disbursements.

For Matured bonds.....	\$28,000.00	
Bank certificates of deposit.....	109,535.73	
	<hr/>	<hr/>
	\$137,535.73	\$137,535.73

SECURITIES IN THE SINKING FUND.

BONDS OF THE CITY OF MINNEAPOLIS—

Nos. 1535 to 1555 inclusive, 4½ per cent interest.....		\$21,000.00
491 to 512 " 5 " " ".....		22,000.00
1504 to 1534 " 4½ " " ".....		31,000.00
1556 to 1603 " 4½ " " ".....		48,000.00
1174 to 1208 " 4½ " " ".....		35,000.00
1984 to 2043 " 4 " " ".....		60,000.00
3539 to 3638 " 4 " " ".....		100,000.00
4054 to 4153 " 4 " " ".....		100,000.00

Total bonds.....

Security Bank, certificate of deposit No. 69,222, dated September 17, 1888; interest at 5 per cent per annum.....	\$5,342.90
Security Bank, certificate of deposit No. 71,220, dated December 27, 1888; interest at 5 per cent per annum.....	3,480.11
Security Bank, certificate of deposit No. 75,449, dated July 29, 1889; interest at 4 per cent per annum.....	30,000.00
Security Bank, certificate of deposit No. 78,124, dated December 12, 1889, interest at 4 per cent per annum.....	10,950.37
City Bank, certificate of deposit No. 10,311, dated July 29, 1888; interest at 5 per cent per annum.....	29,797.86
First National Bank, certificate of deposit No. 147,874, dated July 29, 1889; interest at 4 per cent per annum.....	38,787.50
	<hr/>
	\$535,358.74

LIBRARY FUND.

Receipts.

From Balance January 1, 1889.....	\$48,985.04
Taxes.....	38,024.06
E. M. Johnson, sec'y, money returned, refunded on insurance	22.75
Farmers' and Mechanics' Savings Bank, bills payable.....	25,000.00
Subscriptions.....	27,095.00

Disbursements.

For Comptroller's warrants.....	\$127,217.49
Present balance.....	11,909.36
	<hr/>
	\$139,126.85
	<hr/>
	\$139,126.85

TREASURER'S REPORT.

99

BOARD OF EDUCATION.

Receipts.

From Taxes.....	\$424,309.11
Bills payable.....	302,624.00
Brewster, Cobb & Estabrook, sale of bonds.....	126,829.58
Blake Bros. & Co., sale of bonds.....	76,781.25
County treasurer, state apportionment.....	59,392.00
Sundry warrants turned back into fund.....	153.71
Burrows Bros. & Co.....	4.29
E. H. Moulton, city treasurer, refund on pay roll.....	24.00
E. H. Moulton, city treasurer amounts unclaimed on pay rolls.....	2.50
W. S. Pearson, clerk, sale of old bell.....	693.40
" " " " carpet.....	10.00
" " " " black board.....	7.75
" " " " old building.....	110.50
" " " " old seats.....	21.00
Insurance.....	4.50
Sundries.....	15.33
Tuition.....	403.30
Teachers' salaries refunded.....	155.10

Disbursements

For Account overdrawn January 1, 1889.....	\$1,914.65
Comptroller's warrants.....	956,969.49
Coupons.....	2,700.00
Present balance.....	29,958.17
	<hr/>
	\$991,542.31 \$991,542.31

GENERAL FUND.

Receipts.

From balance, January 1st, 1889.....	\$63,720.80
Taxes.....	659,778.72
Licenses.....	266,170.47
Poundmasters.....	358.65
Western Union Telegraph Co., for rent.....	1,920.00
Western Union Telegraph Co., for light.....	300.00
Northwestern Telephone Exchange Co., for rent.....	720.00
Northwestern Telephone Exchange Co., for light.....	200.04
Municipal court.....	38,672.67
Chas. F. Haney, city clerk, fees and moneys.....	6,799.70
Chas. F. Haney, city clerk, fees and moneys received January 17, 1890, which properly belongs to 1889 \$1,745.25.....	
Engineer's permits.....	9,071.89
W. A. Barnes & Co., refund on bill.....	150.00
V. M. Smith, refund Dakota relief committee.....	1,100.00
New England Furniture & Carpet Co., refund on warrant No. 41,024.....	1.81
R. D. Russell, election money returned by A. R. Camp.....	9.00
R. R. Henderson, Soldiers' Home, balance of \$55,000. contingent fund.....	592.00
Auger Taylor, refund on work house pay roll.....	12.00
The Hartford Steam Boiler Insurance Co., loss on boiler.....	274.39
John West, supt. of work house, board of county prisoners and vegetables sold.....	193.08
Mayville Lime & Coal Co., warrants not issued.....	65.36
John S. Brown, warrant not issued.....	30.40
Sinking Fund Commissioners, advanced for payment of maturing bonds.....	28,000.00
Sister M. Philomena, hospital treatment.....	70.00
Wm. H. Lauderdale, taxes on land condemned for street purposes.....	29.66
J. F. Calderwood, city comptroller, transfer licenses.....	1.00
J. F. Calderwood, city comptroller, refund on city officers' pay roll.....	16.67
Chas. F. Haney, city clerk, discount on typewriter.....	9.75
Board of Education, advertising sale of bonds.....	163.75
Minneapolis Street Railway Co., labor, material—repaving on cable line.....	233.20
E. H. Moulton, city treasurer, unclaimed on pay rolls.....	59.02
Sundry pay rolls, differences.....	8.77
Minneapolis Street Railway Co., relaying pavement.....	1,176.39
F. L. Stetson, chief fire department.....	
Sale of horses.....	500.00
Sale of harness and weights.....	14.37
Sale of carboys.....	52.20
Work done by department.....	32.43
R. Roberts, weighing, city scales.....	117.45
Poor department, refund.....	233.71
N. Adams, rent of barn.....	66.67
Flour City Transfer Co., rent of barn.....	480.00

Chas. A. Cornman, city clerk, charter and ordinance	3.00	
J. R. Phelps, refunded on warrant No. 37,432	2.50	
John Sullivan, refunded on police department pay roll	112.50	
Jas. Forrestal, forfeit on contract	1,000.00	
Warrant No. 39,209, permanent improvement revolving fund, for amount advanced in 1888	50,000.00	
Warrant No. 39,826, third ward street fund, for amount ad- vanced in 1886	5,000.00	
Warrant No. 39,824, seventh ward street fund, for amount advanced in 1886	1,600.00	
Warrant No. 39,823, first ward street fund, for amount ad- vanced in 1887	2,600.00	

Disbursements.

For Comptroller's warrants	\$977,148.76	
Matured bonds	28,000.00	
Present balance	136,575.26	
	<hr/>	
	\$1,141,724.02	\$1,141,724.02

PERMANENT IMPROVEMENT FUND.

Receipts.

From Taxes	\$253,575.41	
Brewster, Cobb & Estabrook, sale of bonds	229,468.58	
R. L. Day & Co., sale of bonds	198,632.00	
Water works fund, returned to fund warrant No. 47,533	50,000.00	
Minneapolis Gas Light Co., advance for paving	206.05	
J. C. Plant, repairs on paving	9.00	
C. A. Nimocks, paving tax for 1885, refunded	33.00	
North Star Woolen Mill Co., repairs on paving	20.00	
Joseph Cardinal, sale of ground	400.00	
McMillan & Hastings, sale of building	310.00	
R. J. Stark for Ringwell, amount having been paid Franklin Cook estate	34.87	
City engineer, error in pay rolls	31.50	
Kate G. Reebeeth, refund on statement, city engineer	50.00	
E. H. Moulton, city treasurer, amounts unclaimed on pay rolls	461.13	
Northwestern Fire & Marine Insurance Co., crematory fire	219.41	
Pacific Fire Insurance Co., crematory fire	219.41	
Warrant No. 38,647, water works fund for amount advanced in 1888	50,000.00	

Disbursements.

For Amount overdrawn January 1, 1889, to the amount of	\$1,877.30	
Comptroller's warrants	684,313.75	
Present balance	97,479.31	
	<hr/>	
	\$783,670.36	\$783,670.36

PERMANENT IMPROVEMENT REVOLVING FUND.

Receipts.

From Taxes	\$197,078.24	
Blake Bros. & Co., sale of bonds	48,710.00	
Municipal Investment Co., sale of bonds	98,526.00	
Brewster, Cobb & Estabrook, sale of bonds	50,731.84	
Board of Education, money advanced to build sewer	2,475.00	
General fund, warrant No. 42,404	28.96	
Engineer department, error in pay roll	3.50	
Sewer department, error in pay roll	25.03	
C. A. Nimocks, erroneously refunded	38.94	
F. G. Winston, advance for sewer	6,666.00	
Lewis W. Campbell, advance for sewer	13,334.00	
W. A. Barnes & Co., advance for sewer	10,310.01	
Minneapolis Street Railway Co., advance for sewer	31,048.86	
Day & Willard, advance for sewer	1,000.00	
Permanent improvement fund, warrant No. 43,527	40.10	
Permanent improvement fund, city's portion of sewer, curb, gutter and paving	270,030.68	
Warrant No. 41,592, general fund, for amount advanced in 1889	50,000.00	

Disbursements.

For Account overdrawn January 1st, 1889, to the amount of	\$47,753.62	
Comptroller's warrants	776,020.09	
Account overdrawn to the amount of	43,726.55	
	<hr/>	
	\$823,773.71	\$823,773.71

TREASURER'S REPORT.

101

WATER WORKS FUND.

Receipts.

From Balance January 1, 1889.....		\$101,425.71	
Taxes.....		103,868.52	
Rentals.....		157,514.22	
S. D. Works and others, advance for laying water mains.....		785.00	
Board of Education, advance for laying water mains.....		1,934.10	
W. A. Barnes & Co., advance for laying water mains.....		367.90	
W. A. Barnes & Co., donation for laying water mains.....		14.86	
C. E. Cotterel & Co., advance for laying water mains.....		1,600.00	
F. T. Moody, registrar, warrant No. 13,372, turned back into fund.....		37.70	
David Bergstrom, refund on pay roll.....		21.87	
John Lingreer, refund on pay roll.....		11.37	
Osten Flow, refund on pay roll.....		21.87	
Jas. Haley, refund on pay roll.....		16.62	
Minneapolis Street Railway Co., lowering water pipe.....		319.26	
Minneapolis Street Railway Co., re-laying water pipe.....		580.96	
E. H. Moulton, city treasurer, unclaimed on pay rolls.....		83.40	
Warrant No. 41,212, permanent imp. fund, for amount advanced in 1888.....		50,000.00	
Warrant No. 42,168, permanent imp. fund, for amount advanced in 1889.....		50,000.00	

Disbursements.

For Comptroller's warrants.....	\$401,177.07	
Present balance.....	67,426.29	
	<hr/>	
	\$468,603.36	\$468,603.36

CITY PARK FUND.

Receipts.

From Balance January 1, 1889.....		\$76,351.25	
Taxes.....		96,188.47	
F. A. Chamberlain, cashier, sale of bonds.....		101,022.89	
Blake Bros. & Co., sale of bonds.....		41,116.67	
Farmers' and Mechanics' Savings Bank, temporary loan.....		33,000.00	
Lakewood cemetery association, bills payable.....		3,000.00	
State treasurer, balance of purchase money for state park, Ed. A. Stevens, secretary, collections.....		7,716.94	
W. G. Nye, secretary—		355.80	
Refund of advance to contingent fund.....		500.00	
Sale of lot 5, block 39, St. Anthony.....		1,500.00	
Refund on warrant No. 1523.....		45.45	
Refund on warrant No. 3302.....		319.63	
Refund of taxes.....		63.00	
State park privileges.....		1,300.00	
Privileges at Lake Calhoun.....		200.00	
Boat rentals.....		3,011.55	
Sundry collections.....		326.75	

Disbursements.

For Comptroller's warrants.....	\$301,229.03	
Present balance.....	4,790.27	
	<hr/>	
	\$306,019.30	\$306,019.30

INTEREST FUND.

Receipts.

From Balance, January 1, 1889.....		\$66,388.51	
Taxes.....		240,934.36	
Blake Bros., accrued interest on bonds sold.....		77.78	
R. L. Day & Co., accrued interest on bonds sold.....		244.44	
Brewster, Cobb & Estabrook, accrued interest on bonds sold.....		88.89	

Disbursements.

For Coupons.....	\$247,612.50	
Present balance.....	50,121.48	
	<hr/>	
	\$307,733.98	\$307,733.98

FIRST WARD FUND.

From Taxes.....		22,069.90	
John Foley, street commissioner, sale of earth.....		129.10	
A. B. Merriam, sidewalk tax refunded.....		90.36	
E. H. Moulton, city treasurer, unclaimed on pay rolls.....		18.87	
Repairing sidewalk, etc., warrant No. 47,534.....		191.46	
Error in extension of pay roll.....		3.00	
Warrant No. 45,306, general fund, for amount advanced in 1886.....		2,600.00	

Disbursements.

For Account overdrawn January 1st, 1889.....	\$938.24	
Comptroller's warrants.....	23,737.95	
Present balance.....	426.50	
	<hr/>	
	\$25,102.69	\$25,102.69

SECOND WARD FUND.

Receipts.

From Balance January 1, 1889.....	\$5,672.43	
Taxes.....	23,027.94	
John H. Brown, street commissioner, sale of earth.....	163.00	
Dual City Collection Bureau, rebate on tax.....	56.33	
Repairing sidewalk, etc., warrant No. 47,535.....	603.35	
Warrant No. 43,794, transfer.....	22.55	
Refund on warrant No. 42,171.....	50	

Disbursements.

For Comptroller's warrants.....	\$27,949.25	
Present balance.....	1,506.85	
	\$29,546.10	\$29,546.10

THIRD WARD FUND.

Receipts

From Taxes.....	\$48,754.01	
Hugh Wilson, street commissioner, repairing of sidewalk....	1.00	
Hugh Wilson, street commissioner, sale of earth.....	184.76	
E. H. Moulton, city treasurer, unclaimed on pay rolls....	13.61	
G. A. Dale, advance for sidewalk.....	3.64	
Repairing sidewalks, etc., warrant No. 47,536.....	1,013.31	
City engineer, certificate No. 10,038.....	33.18	
" " " " No. 8,970.....	37.80	
" " " " No. 8,973.....	19.04	
" " " " No. 11,596.....	98.51	
" " " " No. 11,485.....	43.33	
Warrant No. 40,779, general fund, for amount advanced in 1886.....	5,000.0	

Disbursements.

For Amount overdrawn January 1, 1889, to the amount of.....	\$260.57	
Comptroller's warrants.....	48,536.37	
Present balance.....	6,405.25	
	\$55,202.19	\$55,202.19

FOURTH WARD FUND.

Receipts.

From Balance, January 1st, 1889.....	\$4,722.94	
Taxes.....	70,025.13	
T. B. Walker, advance for grading.....	1,000.00	
J. A. Ridgeway, advance for grading.....	800.00	
J. A. Ridgeway, donation for grading.....	226.66	
Minneapolis Street Railway Co., grading.....	236.75	
Robt. McMullen, street commissioner, sale of earth.....	9.00	
W. F. Dealing, supt. sidewalks, labor performed.....	3.35	
E. H. Moulton, city treasurer, unclaimed on pay rolls.....	16.21	
Repairing sidewalks, etc., warrant No. 47,537.....	265.54	
Error in pay roll.....	1.75	
City engineer, certificate No. 9,396.....	15.70	
" " " " " 10,737.....	197.76	
" " " " " 7,737.....	198.00	
" " " " " 11,583.....	7.00	

Disbursements.

For Comptroller's warrants.....	\$73,926.39	
Present balance.....	3,799.40	
	\$77,725.79	\$77,725.79

FIFTH WARD FUND.

Receipts.

From Balance January 1, 1889.....	\$7,740.34	
Taxes.....	88,481.62	
Sixth ward street fund, transfer warrant No. 39,825.....	750.00	
Minneapolis Street Railway Co., grading.....	298.23	
Minneapolis Street Railway Co., laying sidewalks.....	42.00	
J. M. Cole, street commissioner, crosswalk.....	10.00	
" " " " " repairs on sidewalk, etc.....	16.20	
E. H. Moulton, city treasurer, refund on pay roll.....	88.67	
Unclaimed on pay rolls.....	43.15	
C. C. Spotswood, refund on pay roll.....	28.44	
Repairing sidewalks, etc., warrant No. 47,538.....	754.16	
City engineer, certificate No. 7,609.....	19.80	
" " " " " No. 7,927.....	31.90	
" " " " " No. 7,746.....	20.33	

Disbursements.

For Comptroller's warrants.....	\$94,349.74	
Present balance.....	3,975.10	
	\$98,324.84	\$98,324.84

TREASURER'S REPORT.

103

SIXTH WARD FUND.

Receipts.

From Balance, January 1st, 1889.....		\$520.54	
Taxes.....		31,165.41	
A. Graber, advance for sidewalk.....		9.10	
E. H. Moulton, city treasurer, unclaimed on pay rolls.....		.82	
Repairing sidewalks, etc., warrant No. 47,539.....		344.15	
City engineer, certificate No. 8,009.....		40.34	
" " " " " 9,932.....		11.20	
" " " " " 8,654.....		25.71	
" " " " " 7,879.....		18.67	
" " " " " 7,831.....		37.34	
" " " " " 8,343.....		20.67	

Disbursements.

For Comptroller's warrants.....	\$29,092.70		
Present balance.....	3,101.25		
	<hr/>	\$32,193.95	\$32,193.95

SEVENTH WARD FUND.

Receipts.

From Balance January 1, 1889.....		\$2,861.14	
Taxes.....		14,456.29	
C. M. Spillman, street commissioner, sale of earth and lumber.....		493.90	
John Gund Brewing Co., refund warrant No. 43,908.....		16.17	
Repairing sidewalks, etc., warrant No. 47,540.....		196.13	
E. R. Barber, grading East Lake street.....		74.67	
Ellen L. Barber, grading East Lake street.....		37.33	
E. H. Moulton, city treasurer, unclaimed on pay rolls.....		1.62	
City engineer, certificate No. 7,408.....		38.25	
" " " " " No. 8,413.....		24.70	
" " " " " No. 11,520.....		14.54	
" " " " " No. 44,290.....		21.23	
Warrant No. 44,970, general fund, for amount advanced in 1886.....		1,600.00	

Disbursements.

For Comptroller's warrants.....	\$17,913.57		
Present balance.....	1,922.40		
	<hr/>	\$19,835.97	\$19,835.97

EIGHTH WARD FUND.

Receipts.

From Balance January 1st, 1889.....		\$17,866.48	
Taxes.....		44,404.90	
J. S. Tripp, street commissioner, sale of earth.....		1,116.50	
J. S. Tripp, street commissioner, grading on 22d street.....		50.00	
City engineer, certificate No. 11,558.....		48.72	
Repairing sidewalks, etc., warrant No. 47,541.....		425.24	
E. H. Moulton, city treasurer, unclaimed on pay rolls.....		16.33	
J. S. Tripp, street commissioner, refund on pay roll.....		1.60	

Disbursements.

For Comptrollers warrants.....	\$58,568.39		
Present balance.....	5,361.38		
	<hr/>	\$63,929.77	\$63,929.77

NINTH WARD FUND.

Receipts.

From Balance January 1st, 1889.....		\$1,465.25	
Taxes.....		18,284.03	
John Flemming, street commissioner, sale of stone and earth.....		295.35	
J. C. Valke, sale of earth.....		17.00	
Geraldo Tramulato, sale of earth.....		40.00	
Repairing of sidewalks, etc., warrant No. 47,542.....		239.71	
E. H. Moulton, city treasurer, unclaimed on pay rolls.....		1.50	

Disbursements.

For Comptroller's warrants.....	\$17,240.20		
Present balance.....	3,042.64		
	<hr/>	\$20,282.84	\$20,282.84

CITY OF MINNEAPOLIS.

TENTH WARD FUND.

Receipts.

From Taxes.....	\$7,654.72	
Refund on warrant No. 39,511.....	1,036.66	
Wm. J. Bursell, Vincent Reeves and Benjamin H. Billings, money advanced for street purposes.....	1,000.00	
Wm. J. Bursell, sale of earth.....	30.00	
W. R. Metcalf, street commissioner, sale of earth and stone.....	157.91	
E. H. Moulton, city treasurer, unclaimed on pay rolls.....	15.00	

Disbursements.

For Account overdrawn January 1st, 1889, to the amount of.....	\$759.55	
Comptroller's warrants.....	8,674.10	
Present balance.....	460.64	
	<hr/>	<hr/>
	\$9,894.29	\$9,894.29

ELEVENTH WARD FUND.

Receipts.

From Balance January 1, 1889.....	\$1,300.13	
Taxes.....	27,341.04	
E. H. Moulton, city treasurer, unclaimed on pay rolls.....	4.95	
Repairing sidewalks, etc., warrant No. 47,543.....	550.53	

Disbursements.

For Comptroller's warrants.....	\$28,631.91	
Present balance.....	654.74	
	<hr/>	<hr/>
	\$29,286.65	\$29,286.65

TWELFTH WARD FUND

Receipts.

From Balance January 1, 1889.....	\$253.92	
Taxes.....	6,979.38	
W. Marr, street commissioner, sale of earth.....	467.57	
E. H. Moulton, city treasurer, unclaimed on pay rolls.....	1.75	

Disbursements.

For Comptroller's warrants.....	\$7,358.27	
Present balance.....	344.35	
	<hr/>	<hr/>
	\$7,702.62	\$7,702.62

THIRTEENTH WARD FUND.

Receipts.

From Balance January 1, 1889.....	\$1,352.71	
Taxes.....	3,571.83	
E. H. Moulton, city treasurer, unclaimed on pay rolls.....	8.48	

Disbursements.

For Comptroller's warrants.....	\$3,752.94	
Present balance.....	1,180.08	
	<hr/>	<hr/>
	\$4,933.02	\$4,933.02

TOTAL RECEIPTS AND DISBURSEMENTS FOR YEAR.

Included in these footings are various transfers from one fund to another for advances previous to 1889, for net receipts and disbursements.
See Comptroller's report, exhibit E.

	BALANCES JANUARY 1, 1889.		Gross Receipts.	Gross Receipts, including balances.	Gross Disbursements.	PRESENT BALANCES.	
	Debit.	Credit.				Debit.	Credit.
Cash on hand January 1st, 1889.....	\$987,153.26	\$48,985.04	\$90,141.81	\$130,126.85	\$127,217.40		\$11,909.36
Library fund.....			901,542.31	901,542.31	950,669.40		29,958.17
Board of Education.....	1,914.65		1,078,003.22	1,141,724.02	1,005,148.76		136,575.26
General fund.....		63,720.80	783,670.36	783,670.36	684,313.75		97,479.31
Permanent improvement fund.....	1,877.30		780,047.16	780,047.16	776,020.09	\$48,726.55	
Permanent improvement revolving fund.....	47,753.62		367,177.65	408,603.36	401,177.07		67,426.29
Water works fund.....		101,425.71	280,668.05	306,019.30	301,929.03		4,790.27
City park fund.....		16,351.25	241,345.47	307,733.98	247,612.50		60,121.48
Interest fund.....		66,388.51	137,535.73	137,535.73	137,535.73		
Sinking fund.....			25,102.69	25,102.69	23,737.95		426.50
First ward fund.....	398.24		23,873.67	20,546.10	27,049.25		1,596.85
Second ward fund.....		5,672.43	55,202.19	55,202.19	48,536.37		6,405.25
Third ward fund.....	360.57		73,002.85	77,725.79	73,026.39		3,739.40
Fourth ward fund.....		1,722.04	90,584.50	98,324.84	94,349.74		3,975.10
Fifth ward fund.....		7,740.34	31,673.41	32,193.95	29,002.70		3,101.25
Sixth ward fund.....		2,320.54	16,974.82	19,835.97	17,913.57		1,922.40
Seventh ward fund.....		2,861.14	46,063.90	63,929.77	58,568.30		5,361.38
Eighth ward fund.....		17,806.48	46,063.90	63,929.77	58,568.30		3,042.64
Ninth ward fund.....		1,405.35	18,877.30	20,282.84	17,240.20		490.64
Tenth ward fund.....	759.55		9,894.20	9,894.20	8,674.10		654.74
Eleventh ward fund.....		1,390.13	9,894.20	9,894.20	28,631.91		7,735.27
Twelfth ward fund.....		253.92	27,689.32	30,286.65	3,752.04		344.35
Thirteenth ward fund.....		7,448.70	7,448.70	7,702.62	1,877.30		344.35
Overdraft on Board of Education, Jan. 1, 1889.....		1,352.71	3,580.31	4,933.02	47,753.62		
" " permanent imp. fund, Jan. 1, 1889.....			1,914.65				
" " perm. imp. rev. fund, Jan. 1, 1889.....			1,877.30				
" " First ward fund, Jan. 1, 1889.....			47,753.62				
" " Third ward fund, Jan. 1, 1889.....			938.24				
" " Tenth ward fund, Jan. 1, 1889.....			260.57				
Public Library.....			759.55				
Board of Education.....						11,900.36	
City of Minneapolis.....						29,958.17	
Total.....	\$940,657.19	\$840,657.19	\$5,242,810.53	\$5,520,963.79	\$5,133,159.62	\$40,530.72	\$440,530.72

ANNUAL REPORT

OF THE

CITY ENGINEER

OF THE

City of Minneapolis

FOR THE

Fiscal Year Ending December 31, 1889.

ANDREW RINKER, City Engineer.

MINNEAPOLIS:
HARRISON & SMITH, PRINTERS.
1890.

CITY ENGINEER'S DEPARTMENT.

ANDREW RINKER,
City Engineer.

R. L. COX,
Chief Clerk.

CHARLES O. HUNTRESS,
Ass't City Engineer.

W. H. GRAVES,
Head Bookkeeper.

WATER WORKS DIVISION.

W. W. REDFIELD,
Engineer.

G. BOGERT,
Draughtsman.

SEWER DIVISION.

W. D. VAN DUZEE,
Engineer.

R. J. STARK,
Bookkeeper.

CARL ILSTRUP,
Ass't Engineer.

J. W. FLEU,
Chief Inspector.

G. W. SUBLETTE,
Sup't of Construction.

AUGUST RYDH,
Time Keeper.

M. E. SLEEPER,
Street Foreman.

F. C. DETERLY,
Transitman.

Three Levelmen, four Rodmen, four Inspectors, one Clerk, two Draughtsmen.

STREET DIVISION.

I. E. HOWE,
Engineer.

B. H. DURHAM,
Transitman.

E. R. DUTTON,
Ass't Engineer.

W. F. DEALING,
Sup't of Sidewalks.

F. G. PARKHILL,
Assessment Clerk.

Four Levelmen, six Rodmen, one Draughtsman, one Clerk.

BRIDGE AND BUILDING DIVISION.

F. W. CAPPELEN,
Engineer.

A. B. COE,
Ass't Engineer.

One Draughtsman, one Rodman.

CITY ENGINEER'S REPORT.

MINNEAPOLIS, Minn., January 1, 1890.

To the Honorable City Council, City of Minneapolis:

GENTLEMEN—In accordance with your directions I herewith submit the annual report of work done under the direction and supervision of the engineering department during the fiscal year ending December 31st, 1889. In so doing I present herewith schedules and tables showing in detail the kind and character of work done and the cost of the same.

Owing to many requests from officials of other municipalities and officers of several of the bureaus of the census department, asking for information covering nearly every branch of our public works, I would deem it proper at this time to preface this report with a general description of the public works done not only during the past year, but as they now exist, so far as they pertain to the municipal work coming under the direction and supervision of the engineering department. I do so with a feeling that my connection with the department during the period of the greatest prosperity of our city, and during the period in which the greater portion of our public works have been constructed, will be considered a sufficient excuse for my attempting to show or describe the character and extent of the public improvements as they exist to-day. I desire to show that since entering the department nearly nineteen years ago, the work that then required a force of four men in the engineering department has grown to such an extent as to require a ten-fold increase in the force, and also to show that practically all of the public improvements have been made during the past eight years.

The engineering department has charge of all public works done in the city except that done by the park commissioners. For the convenience of operating the department, it has been deemed best to subdivide it in the following manner:

The general department, having charge of the street improvements such as grading, paving, laying sidewalks, setting curbstone, making surveys for street openings, making assessment rolls for all special assessments, setting street and building grades, etc. In this department are kept a record of all surveys of streets, maps and plats of all additions to the city, topographical maps and profiles showing elevations of all streets and their grades, etc.

The sewer department has charge of the construction of all sewers, drains, etc.; keeps a record of all work done by plats showing size and location of sewers, with their house, manhole and catch basin connections; also issue all permits for connections, and inspect all house connections made by plumbers for sewer and water within the lines of the streets.

Water department, having charge of all engineering in connection with the water works, keeping records of all mains laid, hydrants and valves set, etc.

Bridge and building department, having charge of all bridges and the erection of fire department and water works, and such other buildings as the city council may order built.

The cleaning of all streets and the repairs of all streets not paved are under the charge of a street commissioner, one street commissioner being appointed by the council for each ward. All street commissioners are under

the general supervision of the city engineer and do all street grading in their respective wards when the same is not done by contract: all street sprinkling is done under their immediate supervision, and they also have charge of the repairs of all sidewalks where the property owner fails to make the necessary repairs.

PAVING.

At the end of the fiscal year there were 618,139 square yards of street paving, or a total of 24.672 miles of streets paved. Of this amount 90,994 square yards, or 4.144 miles, were laid during the year. Of the total paving, about 80 per cent. is cedar block, the remainder granite. The total expenditure for paving has been \$887,980. The amount expended during the year just ended has been \$93,774. In 1890 there is to be laid 112,247 square yards, or 4.326 miles, at an estimated cost of \$118,013. In this connection I would say that all the street paving done in the city has been done during the past eight years, an average of three miles per year. Cedar block paving, in which the blocks are six inches long and from four to eight inches in diameter, are laid on pine plank two inches thick; the interstices are filled with gravel (no cement or paving composition is now used.) The cost per square yard averages about \$1. This price includes excavation and removal of material. There has been no granite paving laid during the past three years.

CURBSTONE.

There are now 67.51 miles of curbstone set in the city, the cost of which has been \$396,143. During the past year 8.11 miles have been set at a cost of \$38,422. Of the curbstone set during the past year, 70 per cent. was the artificial stone made of Portland cement and sand; the remaining 30 per cent. was the Kettle river sandstone, the cost of the latter being \$1.10 per foot while the former averaged 80½ cents per foot. During the year 1890 there are to be 9,967 miles of curbstone set at an estimated cost of \$56,957. As is the case with the paving, the first curbstone was set in the year 1882. The artificial stone has not been in use more than eighteen months; previous to that time the stone used for curbing was Kettle River sandstone, Mankato, and Stone City (Iowa) limestone. The use of limestone as a curb has been entirely discontinued, the Kettle River sandstone being the only natural stone used for curb: the greater portion of all stone now in use in this city being of that kind.

SIDEWALKS.

There were laid during the year 1889, 191,961 lineal feet of sidewalk, or 34.499 miles, of which 25.319 miles were plank (2 inch pine plank laid upon three 4x4-inch stringers), and 9.182 miles were artificial stone and brick. Of the artificial stone and brick 91½ per cent. was laid by the property owner, and 8½ per cent. by the city, while the city laid 64 per cent. and the property owner 36 per cent. of the plank sidewalk. It must be understood, however, that the abutting property pays the whole cost of constructing the sidewalks in front his property; but when it is built by the owner, the said owner is released from paying the assessment or the assessments are refunded, while the assessments are collected for that built by the city. The assessments for sidewalks ordered for 1890 amount to \$254,001, there being 110.77 miles of sidewalks ordered for that year.

STREET SPRINKLING.

From the tables herewith submitted, it will be seen that there has been 100 miles of streets sprinkled, at a cost of \$55,242.12. I think I may safely say, without the fear of contradiction, that there is no work done by or under the direction of municipal authority that affords more comfort and satisfaction to the general public, and the cost of which is more willingly paid as a special assessment upon abutting property, than is work of street sprinkling. It not only furnishes immunity from dust,

but makes the districts sprinkled more habitable during the summer months in which the work is required to be done, to say nothing of saving the house-keeper more in wear and tear on furniture, carpets, etc., that the cost of sprinkling.

TOPOGRAPHY.

There is an area of about 54 square miles embraced within the limits of the city of Minneapolis, 42 square miles of which lies west and south-west of the Mississippi River; the greatest length north and south being 10 miles, and east and west $6\frac{1}{4}$ miles.

The Mississippi River flows through the city a distance of $8\frac{1}{2}$ miles, and along its easterly side (at the south end) an additional distance of $3\frac{1}{2}$ miles, having a total length within the limits of the city of twelve (12) miles, within which distance it has a fall of 105 feet. Fifty feet of this fall occurs where the waters of the river are divided by Hennepin Island, a distance of 5 miles from the extreme northeasterly, and $2\frac{1}{2}$ miles from the extreme easterly limits of the city. This fall (the Falls of St. Anthony) located almost in the geographical center, furnishes a large percentage of the power required in the manufacturing center of the city. Below the falls the river flows between banks varying in height from 80 to 120 feet, and has an average velocity of about three to four miles per hour, while above the falls the banks have an average height of about 15 feet, and the water flows at a velocity of about $\frac{1}{2}$ of a mile per hour.

Tributary to the river are Shingle Creek in the extreme northern, Bassett's Creek in the central and Minnehaha Creek in the extreme southern portions of the city, all flowing through the city from the west. Minnehaha Creek has its headwaters at Lake Minnetonka, and is the outlet of the lakes in the southwestern portion of the city, known as Rice Lake, Lakes Amelia, Harriet, Calhoun, Cedar and Lake of the Isles, the first and last named having a water area of about 80 and 120 acres respectively, while the remainder have an area varying from 300 to 500 acres each; these lakes all being in the extreme southwestern portion, have a comparatively small part of the drainage area of the city tributary to them.

The elevation of the surface of the water in the four last mentioned lakes varies from 148 feet above city datum in Cedar Lake, to 136 feet above datum in Lake Harriet; or from 52 to 64 feet above the surface of the water in the river at the steel arch bridge, immediately above the falls.

Basset's Creek has its headwaters at Medicine Lake, and flows through Keegan's Lake, and has tributary to it several other small lakes outside, but none within the city limits. It is, however, the outlet for quite an extensive drainage area, lying immediately outside of the city, and through it must be provided an outlet for the low land within the city, known as the Valley of Basset's Creek. The establishment of a drainage and sewerage system for this district has, I think, been satisfactorily solved by the construction of the North Minneapolis sewer tunnel and the intercepting sewer connecting therewith, and the recent straightening of the creek, of which further mention will be made in this report.

Shingle Creek, being in the remote northern portion of the city and having the smallest drainage area of the streams mentioned, does not present any serious obstacles to an economical solution of the drainage system for that district.

The elevation of street grades within the city varies from 100 feet above datum to 230 feet above datum. The general elevations, however, do not vary more than 60 feet, or from 110 feet to 170 feet above city datum; city datum being 709.2 feet above the level of the sea.

THE SEWERAGE SYSTEM.

The sewerage system of the city is at the present time divided into nine districts, having areas varying from 380 to 4,000 acres each. Each of these districts have their outfalls into the river at a point below the falls of St. Anthony. These outfalls in every case are constructed in or through the formation known as the St. Peter sandstone. This

formation in many cases is not what its name implies, and cannot, strictly speaking, be termed a sandstone, as its resistance to a crushing load in many places scarcely greater than ordinary bank sand, and in no case during an experience extending over a period of more than ten years of almost uninterrupted work in constructing these tunnels, have we found it sufficiently compact to admit of its being used as a water carrier without a lining of some character to prevent corrosion.

These outfall tunnels are in most cases not more than six or eight hundred feet in length, and are generally constructed with a semi-circular arch of concrete or beton, with perpendicular side walls of limestone, and the bottom in the form of an inverted segmental arch paved with stone and brick.

Cuts showing the connections between these tunnels and the top main sewers, with their general sizes, dimensions and depths, are embodied in this report. Of the nine districts for which the outfalls are now constructed, six of them are designed to carry the combined flow of storm-water and sewerage, while three are designed to carry only a limited portion of the storm-waters for the district for which they are constructed; the latter are the districts connected with the North, the North-East Minneapolis, and the Third avenue northeast districts.

Where storm-waters are provided for we have adopted the Adams formula for the greater part of our system, and provide for a rain-fall of from $1\frac{1}{2}$ to 2 inches per hour. We have found from close, protracted observation that sewers of sufficient size to provide for a rain-fall of not less than one and one-half inches per hour are best adapted for the quick, heavy rain-falls of this latitude. The sewers of our system are constructed with a gradient so slight that the sewage flowing therein has a velocity less than two feet per second, while the average flow through the entire system can be safely placed at not less than four feet per second. It can thus be seen that sewage entering the system at any point can be carried to the outfall at an average velocity of $2\frac{1}{2}$ miles per hour, thus affording the public immunity, to a great extent, from gases generated in sewers where the sewage has little or no velocity as is often the case, and requiring much less expense in the matter of ventilation, a perfect and satisfactory system of which I may safely say has not yet been devised, although vast sums of money have been expended in many of the leading cities of the world to accomplish this much desired end. With these facts in view we have undertaken to devise a sewage system for this city in such a manner that the necessity for an expensive and at best an unsatisfactory system of ventilation might be reduced to a minimum. I do not wish to be understood, however, by this statement that we have ignored the matter of ventilation entirely, but on the contrary have provided each of the manholes (which on the lines of the smaller sewers are about 150 feet apart) with perforated covers. We have also in operation, at the ends of several of the lateral sewers, automatic flushing tanks, and have now under construction about 75 more, which will furnish an abundant supply of water for flushing purposes at such times as storm-waters cannot be depended upon for that work.

A map showing the sewer system as now constructed, accompanies this report, an examination of which will show that a comparatively large portion of the sewers now built are main or trunk line sewers, the construction of which was necessitated by the rapid growth of the city. In order to reach portions of the city that can now be called thickly populated and which a few years ago were practically unsettled, it was found necessary to carry on the work of building these main sewers at a more rapid rate than is actually the case in cities of more moderate growth, and as a consequence, large sums of money were expended in these mains before the work of building laterals could be carried out to any great extent. This is particularly true of portions of the Third and Eighth wards, the outlets for the sewerage of which is through the North Minneapolis tunnel, and the Twenty-sixth and Twenty-seventh streets main sewer and tunnel.

In order to show the progress made on the work of constructing the system as it now exists, it may be well to state that the work was commenced on the 15th day of June, 1871; during that year and the year following, what is known as the Washington avenue main sewer on Washington avenue, from Hennepin avenue to Eighth avenue south and the tunnel from Washington

avenue to the main under Eighth avenue south, were constructed. Between that time and the beginning of the year 1882, a few lateral sewers connecting with this main were built. In all there was but 2.57 miles built during the eleven years preceding 1882. At the present time there are 60 miles of sewers and 3.5 miles of tunnels built, or a total of 63.5 miles now built and in operation, 96 per cent. of which have been built during the past eight years or an average of 7.6 miles per year during that time. This average has been nearly doubled during the past year, there having been nearly 14 miles built during the season of 1889, and there is now ordered to be built during 1890 13.2 miles. It may not be out of place at this time and in this connection to give a general description of the North Minneapolis sewer tunnel, as that has been a work that has extended over a period of about five years and is one of such importance with the sewerage system that I feel that the reasons leading to, and the objects sought to be obtained by its construction may be stated at this time.

In recommending the carrying out of this work to the city council, I had three objects in view, viz:

First. Construction of a more satisfactory system of sewerage for the territory known as the valley of Bassett's creek, and the drainage area naturally tributary thereto, than could be accomplished by depositing the sewage into the river above the falls, owing to the fact that a considerable portion of the land in that vicinity being at an elevation that permitted its over-flow during periods of high water in the river, during which time the waters of the river would flow back and remain in the sewers for that district.

Second. The construction of the tunnel would admit of an intercepting sewer being built in said Bassett's creek valley, that would not only be free from back-flow from the river, but would be of such a depth as to admit of draining the lands adjacent thereto in such manner as to render it much more valuable for building purposes than if the sewer were built at an elevation that would permit the sewage to flow into the river even at the ordinary stage of water, thereby largely increasing property values in that vicinity.

Third. By the building of this tunnel the entire sewage of the above-named territory, together with all the territory lying north of Bassett's creek and west of the river, could be collected and deposited into the river below the falls where the waters flow between high banks and have a rapid current.

That these objects can and will, and have already to a great extent been accomplished, has already been demonstrated, and I feel confident that the value of this work is not over estimated when we state that, having accomplished any one of the objects named, the city has been fully justified in making the expenditure required to construct said tunnel. It is intended that the larger portion of the storm-waters of this district shall be taken to the river above the falls by a system of storm-water over-flows, and during a large portion of each year all the water of Bassett creek can be intercepted and carried through the intercepting sewer and tunnel into the river below the falls, if it is deemed advisable or desirable to do so.

Maps, plans and profiles showing the location, size and depth of the tunnel and intercepting sewer, together with cuts showing the manner in which connections are made with the creek, etc., are also submitted herewith.

To enter into detail and attempt to describe the character and extent of this work in any but a general way would occupy more time and space than can be devoted to this report; but I may here add that the cost of this work was materially increased on account of changes ordered by your honorable body after its commencement, whereby the length of the line was increased 946.44 lineal feet, and 229 feet already constructed were abandoned. This change was deemed advisable on account of the original line (running on a straight line from the intersection of Second street and Eighth avenue south to the intersection of Fifth street and Sixth avenue north) running too near the river, and also on account of building the tunnel under private property and incurring a greater liability for damage to said property than was necessary. The line was accordingly changed to the line shown on the map, and the greater portion of the work built under the streets. While this change increased the length of line, it did not, in my opinion, improve the quality of the material through which the work was being built. It was found necessary to use timber supports and covering to carry on the work with

safety to the workmen from the time the change was made until the completion of the work. In an experience of several years in constructing tunnels in this sandstone formation, below the falls, this was found necessary. The sandstone through which this tunnel was constructed proved to be much softer than that through which other tunnels were built below the falls, and large quantities of water were encountered flowing mostly through horizontal seams in the sand rock, the principal one being parallel to and about 21 inches from the bottom of the excavation, nearly the entire length of the work. Over 1,000 drain pipes were inserted into the masonry to carry the water from this water seam, the pipes varying from one to eight inches in diameter. The water has now entirely ceased flowing through the larger portion of these pipes, and the flow has greatly diminished in all of them. The character of the material was found to be such that in many cases it was deemed best to increase the thickness of masonry to the thickness called for in the original plans and specifications. This also necessitated excavating large quantities of materials not contemplated in the original estimates. Five thousand six hundred and forty feet of the tunnel was built by work on one heading; air was furnished by forcing it through a four inch wrought iron pipe by means of an air pump. Work was carried on during the greater portion of the time by working three crews in shifts of eight hours each during the twenty-four hours of each working day. The material through which the tunnel was built, from its mouth to a point about 80 feet north of Third avenue north, was the so-called sand rock; from that point to the northerly end the material was sand, clay and boulders. The entire tunnel through this material was constructed below the level of the water in the ground. Many difficulties were encountered, owing to the quantity of water in the sand; the headings were drifted by placing timber bulkheads every 24 inches and solidly timbering sides, top and bottom before the masonry could be put in place. It was also found necessary to timber the excavation where it was made in the blue clay at the northerly end of the tunnel.

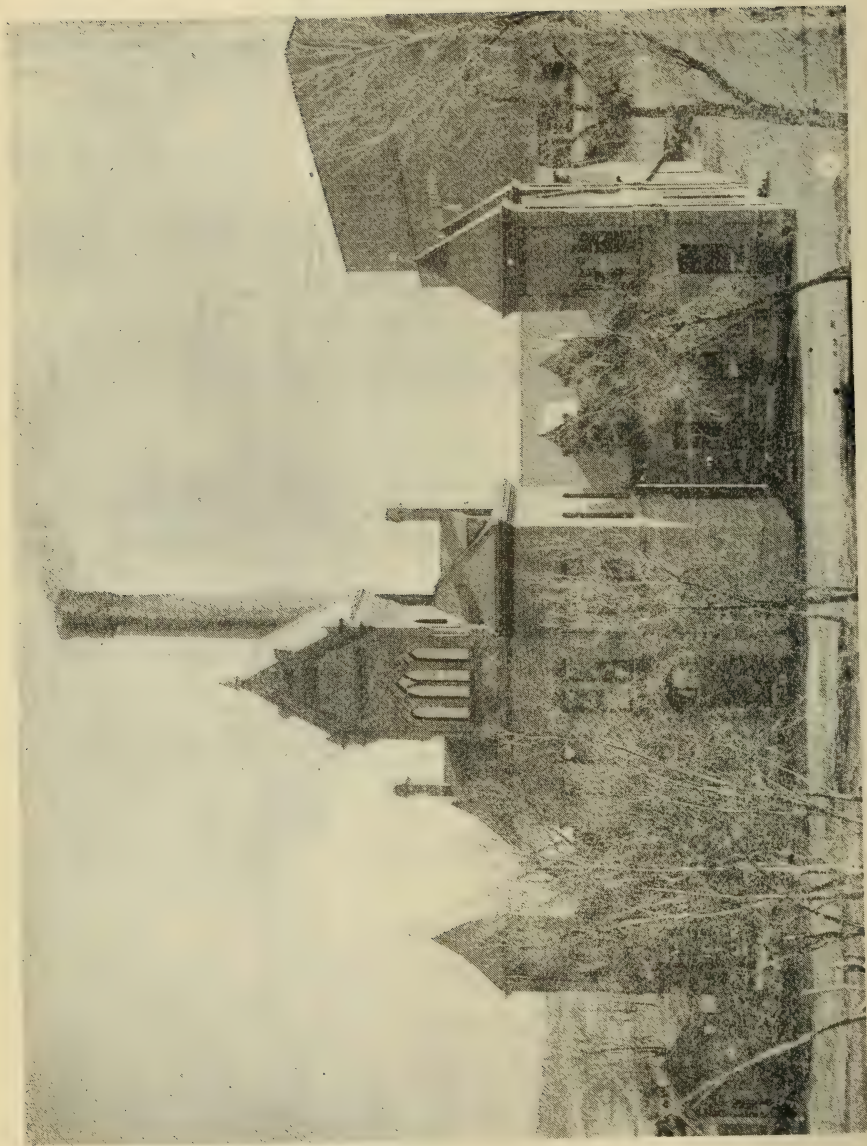
The length of tunnel constructed, including the piece abandoned (229 lineal feet), is 7,404.5 feet. To this should be added depths of shafts now built and in use—162.5 feet. The cost of the tunnel has been \$202,780. This cost does not include value of machinery and tools on hand when work was completed, which have been charged to general tool account and credited to tunnel account.

The pay rolls for sewer work (including all labor, teams and cost of hoisting machines) during the year 1889, amount to \$313,508.49. There has been 295,162 cubic yards of earth and 8,462 cubic yards of rock removed in excavating for sewers during 1889; 9,935,116 brick were used in the work, costing \$95,166.38; 29,662 barrels of cement costing \$36,457.92; and 1,081 tons of coal were consumed in pumping water and hoisting material excavated from sewer branches during the year.

Inventory of machinery on hand January 1, 1890, not including tools, lumber and brick, amounts to \$15,474.39.

WATER WORKS.

The year just closed is one in which the water works system has undergone a great change in the manner of supplying the city with water. Heretofore all water used in supplying the citizens was taken from the Mississippi River at a point immediately above the falls, and has been pumped by hydraulic power, and although the water used for domestic purposes has been taken from a crib located near the middle of the west channel of the river and carried through an iron in-take pipe to the pumping wells, a feeling has existed among many of our citizens that the quality of the water was not as good as it should be. This feeling may or may not have been well founded, and the public may have had just cause for alarm if the city had continued to furnish drinking water from this source. And, although many of our citizens who have given the matter considerable attention, did not share the opinion that the water taken from this source was sufficiently contaminated to cause alarm, yet the feeling prevailed pretty generally that it would be better to take the water from a point on the river



North Side Pumping Station.

further removed from the center of the city. It was then decided to erect a new pumping station on the river bank near Shingle Creek. A tract of land was purchased, containing about 10 acres, and a pumping station erected that would be likely to meet the requirements of the city for a number of years to come. In this station two of the Worthington High Duty Compound Condensing engines have been placed, having a daily capacity of 15,000,000 gallons each, against a pressure of 75 pounds per square inch, or a head of 175 feet, or a total capacity of 30,000,000 gallons per day, raised 175 feet. The building was erected of sufficient size to admit of doubling this pumping capacity when it is deemed necessary.

The water is taken from a crib in the channel of the river and conveyed to the pumping wells through a brick conduit five feet inside diameter. The force main leading from the pumps is three feet in diameter and has a length of 12,000 feet, or 2.27 miles. Removing the pumping station necessitates the use of steam as a power, as the engines in use are guaranteed to develop a duty of 115,000,000 foot pounds, or to raise 115,000,000 pounds of water one foot high with each 100 pounds of coal consumed, (the coal specified being the best quality of anthracite.) This duty can, however, be considerably reduced on the average daily work performed without materially increasing the cost of pumpage over what it was heretofore by water-power from separate stations, as has been the case. Another force main has been ordered laid from Shingle Creek station to Lyndale avenue, and along Lyndale avenue, to connect with the main now laid on the lower end of said avenue, thereby furnishing an additional supply main direct from the pumping station to the south end of the city via Lyndale avenue.

From tests recently made it has been shown that this will afford a satisfactory and sufficient distribution through the entire system of mains as now laid or may be laid for several years to come.

The cost of the water station with the land, engines, boilers, crib and intake, and 12,000 feet of 36 inch force main, has been \$329,741.62. One engine of this plant now furnishes all the water used in the city in connection with the city water-works. The pumps heretofore used at the East and West side stations being now out of service and held in reserve until such time as the additional force main on Lyndale avenue shall be laid. The grounds upon which the Shingle Creek station is located are sufficient in size to admit of being used for park purposes until such time as the city may need it, and but a small expenditure of money would be required to develop it into a beautiful park, its topography being well adapted for that purpose. I would recommend that your honorable body take such action as may be necessary to utilize it for that purpose, thereby not only beautifying the grounds and making them correspond with the improvements now placed thereon, but furnishing the residents of that portion of the city with a public park at a slight expense to the city.

Cuts of the pumping station, boilers and engines, together with a map showing the size and locations of all mains laid in the city is herewith submitted.

In order to show that the same proportionate increase has taken place in the extension of the water-main system, as has been the case with nearly all of our permanent improvements, I quote the following figures: "Total length of mains laid previous to 1882, 20 miles; total length now laid, 141 miles, or 86 per cent. of the whole amount laid during the last eight years.

In this connection I would also recommend that your honorable body take some action toward the prevention of water waste. It is a well-known fact by all who have given the matter any consideration that there is an extravagant waste of water for domestic purposes. I do not wish, however, to be understood as being an advocate for reducing the quantity of water supplied to consumers to such an extent as to prevent their having a liberal or generous supply of water for the purposes required; and also believe it to be good public policy for the city to furnish water to consumers at a price that will as nearly cover the cost as possible; and that a niggardly policy is as much to be condemned as one permitting an extravagant waste of water, yet it may be well to remember that it costs the city about \$6.00 per million gallons to raise water against the pressure required in the city; and am fully of opin-

ion that a liberal supply can be furnished and yet save the city from 15 to 25 per cent. of the cost of pumping. It is argued by some persons that in order to have our beautiful lawns and properly flushed sewers, that it is necessary to run the water through a garden hose with an open butt twenty-four hours per day, and to keep the faucet or valve of the kitchen sink, wash-bowl or closet open at all times. This I do not believe to be a sound argument. It is not necessary, in order to have a beautiful lawn, to flood it with water day and night, and certainly the sewers can be flushed more effectually and more economically by a properly constructed automatic flushing tank than through a kitchen sink.

BRIDGES.

There are now within the city limits spanning the Mississippi river, fifteen bridges. Of these, ten are highway bridges, nine of them built by the city of Minneapolis, one by the counties of Hennepin and Ramsey, which latter has since been transferred to the city of Minneapolis.

Seven of these highway bridges are built of iron or steel, with stone sub-structures, one stone arch, one wire suspension and one wooden bridge. The aggregate length of the city bridges is 8,829 feet.

The railroad bridges across the Mississippi river are, one stone arch, two iron and two wooden bridges.

Contracts have recently been awarded by the city council for the removal of the suspension bridge and the completion of the steel arch bridge. This involves an expenditure of \$80,000. The contracts require the completion of the steel arch bridge July 1st, 1890. This bridge has a width of 80 feet; with a roadway 56 feet wide, and two sidewalks having a width of 12 feet each. The bridge has a length of 530 feet and consists of two spans of 258 feet, center to center, of pins at skew back. Each span has six arches of steel with a rise of 1-10 of the span, or 25.8 feet. The arches have a depth of 60 inches each. In the completion of the remaining one-half of the bridge, iron buckle plates are to be used instead of oak plank, as on the present half. The buckle plates are to be covered with a depth of 6 inches of concrete, upon which is to be placed a cedar block pavement. Recent counts show that there are from 5,000 to 6,000 teams cross the river at this point between the hours of 7 a. m. and 6 p. m.

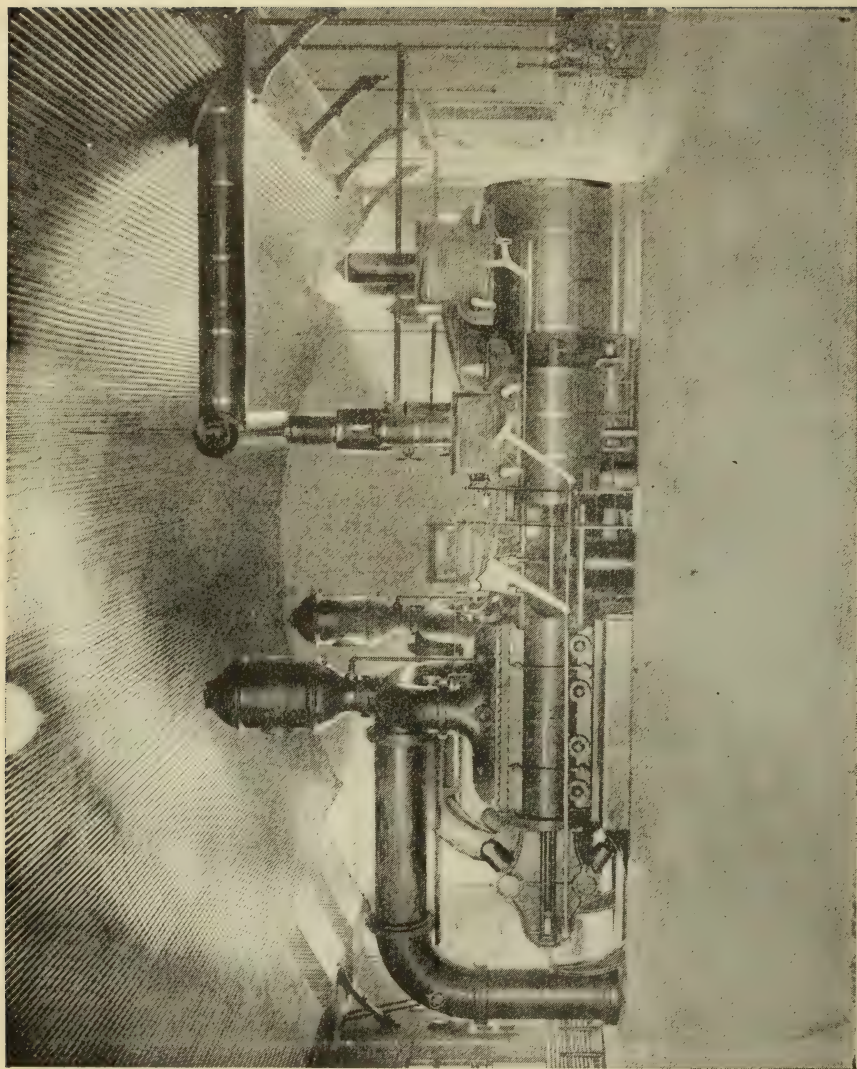
The total cost of city highway bridges across the river, including the completion of the steel arch bridge, is \$1,305,000. This does not include cost of maintenance and repairs.

Details concerning the city bridges can be found in a schedule submitted with this report, showing kind and cost of construction of all bridges owned and built by the city.

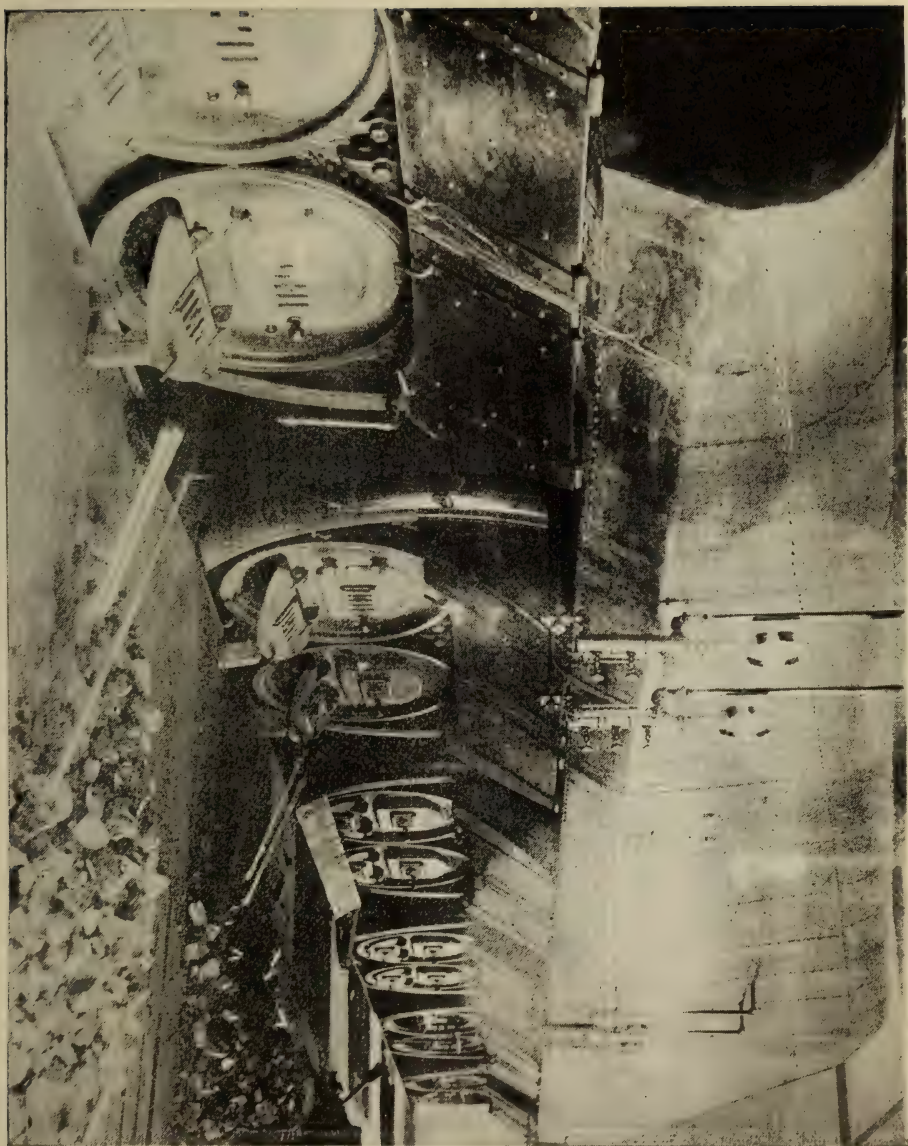
Considerable work in the way of bridge building is contemplated in the near future. The matter of bridging the Manitoba and M. & St. Louis Railroad Companies' tracks, on Washington avenue and Third, Fourth and Fifth streets, and the work of sinking these tracks which has been before the city council and the courts, will probably be brought to a conclusion during the coming year. While the matter of bridging the Milwaukee & St. Paul tracks on the Hastings & Dakota division will in all probability be settled in the near future. This is a matter which, in my opinion, should be settled by your honorable body as soon as possible, as the proposed lowering of said tracks will necessitate changing the grades of the approaches upon nearly every street or avenue crossing the same, about forty-two in all. And as long as this matter remains in its present unsettled condition abutting property owners are deterred from making improvements that would otherwise be made. The lowering of these tracks is a matter that would undoubtedly be a great public benefit and also enhance the value of a large amount of private property lying between the tracks and the south limits of the city.

SPECIAL ASSESSMENTS.

As this is a matter with which the engineering department has much to do in the way of making estimates of cost of improvements to be made, and making and presenting to your honorable body lists of the property against which special assessments are to be levied, together with the cost



Pumping Engines - North Side Station.



Boilers-North Side Station.

of said improvements in front of said property, and the great amount of work required in making out rebates and refunding certificates to property owners where the improvements have been annulled or erroneously made, I would respectfully suggest that such legislation be had at the next meeting of the legislature, whereby the great annoyance due to the present method of collecting special assessments and returning those annulled, can be avoided. It may be well in this connection to consider the plan of the city's collecting its special taxes through the city treasurer's office. While I am not prepared to make any special recommendation in this matter, I am of the opinion that a committee of your honorable body could evolve some more practicable plan than that now in vogue. During the coming year special assessments are levied against property, the total frontage of which has a length of not less than 400 miles, covering more than 40,000 descriptions of property, to say nothing of the property covered by deferred payments on account of carrying the assessments on sewers, paving and curb over a period of five years.

During the past year proceedings have been had condemning certain property and authorizing the city to straighten Bassett's Creek, whereby said creek has not only been straightened through private property, but has been in some cases entirely removed from private property and carried through the streets of the city. On Dupont avenue, where the same flows over and along the line of the main intercepting sewers, arrangements have been made whereby the waters of the creek can, during a large portion of the year, be carried through the intercepting sewer and the North Minneapolis tunnel, into the river below the falls. The straightening of the creek in connection with the intercepting sewer and tunnel will undoubtedly prove a great benefit to property in the valley of the creek, and prevent, to a great extent, the overflowing of lands that have heretofore been rendered practically worthless on this account.

Respectfully submitted,
ANDREW RINKER,
City Engineer.

INDEX TO TABLES ANNUAL REPORT 1889.

Table No. 1.	Inventory of Permanent Public Improvements.
" 2.	Expenditures for Public Improvements, 1889.
" 3.	Paving Laid Previous to January 1, 1890.
" 4.	Paving Done During the Season of 1889.
" 5.	Paving Ordered for Season of 1890.
" 6.	Curb and Gutter Set Previous to January 1, 1890.
" 7.	Curb and Gutter Set During Season of 1889.
" 8.	Curb and Gutter Ordered for Season of 1890.
" 9.	Sewers Constructed Previous to January 1, 1890.
" 10.	Sewers Constructed During Season of 1889.
" 11.	Sewers to be Constructed Season of 1890.
" 12.	Grading, Street Cleaning and Street Repairs.
" 13.	Sidewalks Laid During Season of 1889.
" 14.	Sidewalks Ordered for Season of 1890.
" 15.	Additions.
" 16.	Bridges.
" 17.	Lumber.
" 18.	Buildings.
" 19.	Streets Opened and Vacated.
" 20.	Alleys Opened and Vacated.
" 21.	Levels Run and Grade Ordered Set.
" 22.	Water Mains Laid Previous to January 1, 1890.
" 23.	Water Mains Laid During Season of 1889.
" 24.	Water Mains to be Laid During Season of 1890.
" 25.	Street Sprinkling During Season of 1889.
" 26.	Street Sprinkling Ordered Season of 1890.
" 27.	Street Sweeping During Season of 1889.
" 28.	Conduits Laid previous to January 1, 1890.

Table No. 2.

EXPENDITURES FOR PUBLIC IMPROVEMENTS UNDER THE DIRECTION OF THE
CITY ENGINEER. JANUARY 1, 1889, TO JANUARY 1, 1890.

ENGINEERS—			
Pay rolls.....	\$42,123.76		
Blank books.....	525.51		
Instruments and tools (new).....	130.52		
Instrument repairs (old).....	63.18		
Livery.....	57.75		
Postage.....	24.00		
Maps, plats and plat books.....	128.50		
Stationery and office supplies.....	272.19		
Draughtsmen's supplies.....	284.66		
			\$43,610.07
CITY HALL—			
Furniture, repairs, janitor's supplies			1,975.48
SEWERAGE—			
Sewers and sewer tunnels and straightening Bassett's creek...	593,914.36		
Plumbing inspectors.....	3,972.96		
			597,887.32
WARDS—			
Ward expense account—Tools, tool boxes and tool repairs.....			1,848.79
GRADING—			
Streets.....			7,497.42
SIDEWALKS—			
Material, labor and repairs.....			30,693.62
PAVING—			
Paving—new (certified bill has been given, payable July 1, 1890, for \$10,850.68 of this amount).....	94,988.52		
Paving—repairs.....	3,867.32		
			98,755.84
CULVERTS—			
Material.....			465.86
CROSS WALKS—			
Material.....			2,847.73
CURB AND GUTTER—			
Curb and gutter furnished, set and repairs (certified bills given, payable July 1, 1890, for \$19,983.50 of this amount).....			47,658.04
NORTH MINNEAPOLIS PUMPING STATION—			
Material, machinery, tools, etc.....			65,152.74
RAILROAD CROSSING—			
Watchman and fuel.....			548.12
HOSE HOUSE—			
Harrison street and Twenty-fourth avenue northeast.....			3,010.90
CEMENT TEST ROOM—			
Material and labor			33.75
ILLUMINATION—			
Electric lights for bridges and streets during the exposition...			3,000.00
WATERING TROUGHS AND DRINKING FOUNTAINS—			
Material and labor.....			469.31
SPECIAL TAX EXPENSE—			
Descriptions, blanks and filing engineer's certificates.....			1,722.11
SPRINKLING—			
Sprinkling steel arch, suspension and stone arch bridges.....	235.91		
Tank repairs.....	21.47		
			257.38
STREET SIGNS—			
Painting.....			3.50
STREET LIGHTING—			
Moving posts.....			230.00
CONDUITS—			
Paving repairs and material for the Dorset-Edison telephone and fire department conduits (amount to cover above con- duits deposited with city treasurer).....			4,898.28
CABLE LINE AND ELECTRIC RAILWAY—			
Paving repairs for Street Railway Co. (amount to cover above repairs for Street R'y Co. deposited with city treasurer)...			1,845.79
ANNUAL REPORT PUBLICATION—			
Photographs of public buildings, etc.....			11.00
BRIDGES—			
Bridges, bridge repairs, Material, tools, etc.....			64,342.93
DUMPS—			
Material and labor.....			138.96
			\$978,904.94

Table No. 3.

PAVING LAID PREVIOUS TO JANUARY 1890.

All paving is done by contract and all assessable property is assessed for the cost of paving that part of the street on which said property abuts. The general city pays for paving all street intersections and all parts of streets along property exempt from special assessments. The paving tax is paid in five yearly installments.

STREET.	From—	To—	KIND.	Year paved.	Length paved.	Width paved exclusive of gutter and R. R. tracks.	Width of r'd-way.	Rate of assessment per sq. yard.	Contract price per sq. yard.	Price per cu. yd. extra excavation.	Area paved—Sq. yards.	Contract cost.
Bridge Square.	City hall.	1st st.	Granite	1883	501.00	33.00	111.00	\$2.75	\$2.65	.40	2,720.65	\$7,388.80
Bridge Square.	1st st.	St. Louis bridge.	Granite	1884	612.00	46.40	56.00	2.75	2.58 $\frac{3}{4}$	.43	2,906.00	\$8,384.53
Bridge st.	Suspension b'dge	Stone arch b'dge	Granite	1882	1,361.00	46.40	50.00	2.75	.65		7,818.41	8,475.94
Cedar av.	Washington av.	5th st.	Cedar	1888	1,361.00	46.40	50.00	2.75	1.06	.30	7,307.00	*21,486.44
Cedar av.	Stone arch b'dge	4th st.	Granite	1883	1,361.00	46.40	50.00	2.75	.71	.50	7,307.00	*21,486.44
Central av.	4th st.	6th st.	Cedar	1887	890.00	46.40	56.00	2.75	.92	.02	5,819.26	5,386.14
Clinton av.	12th st.	Franklin av.	Cedar	1888	2,650.00	32.00	34.00	1.25	.98 $\frac{1}{2}$	.30	11,458.00	11,605.73
Central av.	6th st.	7th st.	Cedar	1889	685.60	46.40	50.00	1.25	1.02	.12	3,073.00	3,180.18
8th av. S.	Washington av.	3rd st.	Granite	1885	410.00	48.00	50.00	2.75	2.40	.20	2,433.00	5,950.88
8th st. S.	Hennepin av.	Nicollet av.	Cedar	1887	772.00	36.00	38.00	1.25	.94	.02	3,192.65	3,017.47
1st av. N.	Washington av.	Washington av.	Granite	1884	632.00	48.00	50.00	2.75	2.64	.20	3,696.17	9,906.32
1st av. N.	Washington av.	3rd st.	Cedar	1886	410.00	48.00	50.00	1.25	1.11	.30	1,845.48	2,134.08
1st av. N.	Washington av.	4th st.	Cedar	1889	420.00	50.00	50.00	1.25	.98	.20	2,497.34	2,506.06
1st av. S.	Washington av.	Washington av.	Granite	1884	680.53	43.00	50.00	2.75	2.58 $\frac{3}{4}$	.43	3,216.55	8,707.74
1st av. S.	Washington av.	3rd st.	Cedar	1884	415.00	43.00	50.00	1.75	1.64 $\frac{1}{2}$	.20	2,237.19	3,913.30
1st st. N.	1st av.	3rd st.	Cedar	1887	1,480.00	36.50	52.45	1.25	.93	.02	6,076.47	5,670.16
1st st. N.	1st av.	3rd st.	Granite	1885	1,153.00	50.45	52.45	2.75	2.40	.35	5,072.65	12,337.21
1st st. S.	Bridge Square.	Bridge Square.	Granite	1884	1,230.00	50.45	52.45	2.75	2.60	.43	12,386.60	33,600.86
1st st. S.	1st av. S.	3rd av.	Granite	1884	780.00	48.00	50.00	2.75	2.60	.43	12,386.60	33,600.86
1st st. S.	3rd av. S.	5th av.	Granite	1884	288.00	48.00	40.00	2.75	2.60	.43	12,386.60	33,600.86
1st st. S.	5th av. S.	Canal.	Granite	1884	288.00	48.00	30.00	2.75	2.60	.43	12,386.60	33,600.86
1st st. S.	Main st.	Central av.	Cedar	1888	1,405.00	51.00	56.00	1.25	1.06	.35	3,321.28	3,801.57
4th av. S.	Washington av.	4th st.	Cedar	1885	820.00	40.40	50.00	1.25	1.39 $\frac{1}{4}$	.30	4,283.64	6,026.25
4th av. S.	Hennepin av.	1st st.	Cedar	1880	323.30	48.00	50.00	1.25	1.01 $\frac{1}{2}$	.24	1,800.03	1,972.67
4th st. S.	Hennepin av.	Nicollet av.	Cedar	1884	374.00	48.00	50.00	1.75	1.64 $\frac{1}{2}$	.42	2,000.00	3,498.00
4th st.	Nicollet av.	3rd av.	Cedar	1887	900.00	48.00	50.00	1.25	.93	.02	5,142.00	4,812.40
4th st.	3rd av. S.	6th av. S.	Cedar	1888	1,070.00	48.00	50.00	1.25	1.02 $\frac{1}{2}$	.30	5,853.45	6,502.35
4th st. S.	Central av.	8th av. S.	Cedar	1887	5,612.40	42.90	52.50	1.25	1.05	.30	23,579.26	26,812.60
4th st. S.	1st av. S.	2nd av. S.	Cedar	1887	163.00	40.00	40.00	1.64 $\frac{1}{2}$	1.64 $\frac{1}{2}$	.42	724.44	1,191.70
4th st. S.	2nd av. S.	3rd st.	Cedar	1884	163.00	40.00	40.00	1.64 $\frac{1}{2}$	1.64 $\frac{1}{2}$	.42	724.44	1,191.70
5th av. S.	1st st. (part way)	2nd st.	Cedar	1888	330.00	48.00	50.00	1.25	1.03	.30	1,729.06	1,841.89
5th av. S.	Washington av.	3rd st.	Cedar	1888	330.00	48.00	50.00	1.25	1.03	.30	1,729.06	1,841.89

5th st. N.	Hennepin av.	1st st.	410.00	50.45	52.45	\$1.75	\$1.64½	\$4.42	1,910.20	83,327.16
5th st. E.	Hennepin av.	Nicollet av.	468.00	48.00	50.00	1.75	1.64½	.42	2,494.93	4,281.48
5th st. E.	Hennepin av.	3rd av. S.	640.00	48.00	50.00	1.25	.34	.02	1,706.57	1,611.67
5th st. E.	Hennepin av.	2nd av. S.	5,463.9	48.00	50.00	1.25	.900½	.30	3,413.00	3,419.56
14th av. S. E.	Hennepin av.	4th av. S.	320.00	38.40	40.00	1.25	1.05	.24	27,192.85	28,466.35
Hennepin av.	E. end city hall.	5th st.	603.00	54.40	64.00	2.75	2.65	.40	1,109.50	1,393.79
Hennepin av.	Washington av.	6th st.	4,670.00	54.40	64.00	1.60	1.48½	.50	6,220.25	17,104.00
High st.	Spruce place.	Cedar	371.00	36.00	42.00	1.75	1.64½	.42	7,381.37	11,810.19
Alley blk 12, Mpls	Bridge Square.	1st av. S.	449.50	36.00	37.00	1.37	1.27	.40	23,913.80	41,737.11
Alley blk 19, Mpls	Block 1.	Hong's add.	330.40	16.00	16.00	1.75	1.64½	.42	1,795.11	2,425.09
Alley blk 20, Mpls	1st av. N. to main al.	1st & 1st st. to Ry	330.40	16.00	16.00	1.25	1.09	.30	265.44	436.64
Alley	2nd av. S.	3rd av. S.	330.40	16.00	20.00	1.25	1.09	.30	732.00	837.08
Alley	Block 21.	2nd av. S.	157.00	20.00	20.00	1.25	1.09	.30	347.41	418.96
Alley blk 21, Mpls	Minneapolis.	Minneapolis.	167.00	20.00	20.00	2.55	2.55	.....	382.90	426.25
Alley blk 23, Mpls	Block 20.	2nd st.	330.77	16.00	16.00	1.25	1.09	.30	970.40	1,041.24
Alley blk 25, Mpls	1st st. to 2nd st. & 1st av. N.	2nd av. N.	498.03	16.00	16.00	1.25	1.09	.30	870.78	1,001.63
Alley blk 35, Mpls	2nd av. S.	Cedar	331.00	16.00	16.00	1.25	1.09	.30	603.83	716.72
Alley blk 36, Mpls	Washington av.	Cedar	341.10	16.00	16.00	1.25	1.09	.30	625.50	704.89
Alley	Block 36.	Cedar	157.50	16.00	16.00	1.25	1.09	.30	612.97	706.93
Alley	Block 36.	Cedar	92.00	10.00	10.00	1.00	1.25	.....	291.74	364.67
Alley blk 38, Mpls	1st av. S.	Cedar	157.00	20.00	20.00	1.25	1.00	.30	102.22	293.40
Alley	Block 38.	Main alley	433.00	16.00	16.00	2.75	64½	.35	320.67	359.97
Alley blk 39, Mpls	1st av. S.	Minneapolis.	433.00	20.00	20.00	1.25	1.00	.30	*1,640.14	864.03
Alley blk 40, Mpls	2nd av. S.	Cedar	330.40	20.00	20.00	1.25	1.09	.30	685.56	779.98
Alley blk 48, Mpls	Rovey's sub.	3rd st. & 1st W'd Wash av	104.00	12.00	12.00	1.25	1.09	.30	252.00	280.68
Alley blk 49, Mpls	3rd av. S.	Cedar	330.40	18.00	18.00	1.25	1.09	.30	718.43	820.81
Alley blk 50, Mpls	Noble's sub	three alleys.	330.00	20.00	20.00	1.25	1.09	.30	954.34	1,075.63
Alley	Block 51.	Cedar	332.00	12.00	12.00	1.25	1.06	.25	736.12	780.20
Alley	Block 52.	Minneapolis.	350.00	20.00	20.00	1.30	1.28	.40	733.33	840.42
Alley	Block 52.	Minneapolis.	135.8	20.00	20.00	1.25	1.25	.....	272.63	340.79
Alley	Block 53.	Minneapolis.	155.00	20.00	20.00	1.25	1.06	.25	268.26	280.93
Alley	Block 53.	Minneapolis.	280.00	20.00	20.00	1.75	1.48½	.50	923.99	923.99
Alley	Block 54.	Minneapolis.	496.00	16.00	16.00	2.75	1.64½	.35	927.77	*2,261.95
Alley	Block 55.	Minneapolis.	331.00	16.00	16.00	1.07	1.07	.30	624.32	720.46
Alley blk 61, Mpls	3rd st. N.	Cedar	341.76	16.00	16.00	1.25	1.09	.30	604.41	687.92
Alley	Block 62.	Minneapolis.	282.00	16.00	16.00	1.25	1.25	.....	538.36	672.95
Alley	Block 63.	Minneapolis.	147.00	20.00	20.00	2.25	2.53	.....	290.50	734.97
Alley blk 64, Mpls	1st av. S.	Minneapolis.	214.00	18.00	18.00	1.25	1.25	.....	442.50	553.20
Alley blk 65, Mpls	2nd av. S.	Cedar	330.40	20.00	20.00	1.25	1.09	.30	439.29	439.29
Alley blk 66, Mpls	3rd av. S.	Cedar	330.40	20.00	20.00	1.25	1.09	.30	694.32	756.80
Alley blk 66, Mpls	4th av. S.	Cedar	155.30	12.25	12.25	1.25	1.09	.30	928.00	1,013.13
Alley blk 67, Mpls	Main alley	Cedar	264.00	16.00	16.00	1.25	1.09	.30	618.34	743.91
Alley blk 67, Mpls	5th av. S.	Cedar	66.00	15.10	15.10	1.25	1.09	.30	556.00	624.38
Alley blk 81, Mpls	Nic. av. to alley .. and alley to 4th st	Cedar	264.00	16.00	16.00	1.25	1.09	.30	.....	.....

* City furnished blocks.

Table No. 3—Continued.

STREET.	FROM.—	TO—	KIND.	Year paved.	Length paved.	Width paved exclusive of R. R. tracks.	Width of rd way.	Rate of assessment per sq. yard.	Contract price per sq. yard.	Price per cu. yard extra excavation.	Area paved—sq. yards.	Contract cost.
Alley, blk. 82, Mpls	4th to 5th st. N.	1st av. N. to Mn. Al	Cedar.	1889	449.02	16.00	16.00	\$1.25	\$1.00	.30	954.14	\$1,080.05
Main st. S. E.	Central av.	2d av. S. E.	Granite.	1887	1,568.00	54.00	56.00	2.20	1.79	.10	8,352.57	15,040.12
Nicollet av.	East end city hall	Washington av.	Granite.	1883		48.00	50.00	2.75	2.05	.40	4,037.40	13,582.80
Nicollet av.	Washington av.	7th st.	Cedar	1885	3,290.00	48.00	50.00	1.60	1.48½	.30	7,657.07	12,019.69
Nicollet av.	7th st.	8th st.	Cedar	1885		48.00	50.00	1.75	1.53	.30	3,653.30	4,267.81
Nicollet av.	10th st.	16th st.	Cedar	1885	820.00	48.00	50.00	1.25	1.14½	.40	10,128.18	12,225.76
Plymouth av.	River.	16th st.	Cedar	1885	820.00	38.00	40.00	1.35	.98	.09	15,634.00	15,444.08
Royalston av.	6th st.	Lyndale ave.	Cedar	1889	2,849.50	40.00	42.00	1.25	.98	.09	1,334.77	1,136.23
Stone Arch Bldg.	Western av.	Bridge over R. R.	Cedar	1887	356.00	42.00	42.00	1.25	.91	.02	861.53	2,348.65
Suspension	Over east chann	el of river.	Granite.	1883	640.00	29.70	37.30	1.75	.73		1,110.71	1,427.51
2d av. S.	Bridge.		Cedar	1885	670.00	14.92	16.25	2.75	.80		1,024.35	819.48
2d av. S.	Washington av.	Washington av.	Cedar	1884	660.00	48.00	50.00	2.75	2.52	.30	3,638.80	9,987.82
2d av. S.	1st st.	Washington av.	Granite.	1885	1,640.00	48.00	50.00	1.75	1.19	2-10	24,146.65	31,041.30
2d st. N.	6th st.	Grant st.	Cedar	1884	2,981.00	38.00	40.00	2.75	2.53	.40	17,287.10	44,992.55
2d st. S.	Hennepin av.	Hennepin av.	Granite.	1884	1,223.00	50.45	52.45	1.25	1.06	.25	2,553.32	2,771.05
2d st. S.	Central av.	Bank st.	Cedar	1888	1,528.00	48.00	50.00	2.75	2.45	.30	1,473.50	3,731.21
6th av. S.	2d st.	Canal.	Granite.	1887	250.00	50.50	52.50	1.25	1.06	.25	2,553.32	2,771.05
6th av. S.	Washington av.	4th st.	Cedar	1887	740.00	48.00	50.00	2.75	2.45	.30	1,473.50	3,731.21
6th av. S.	7th st.	10th st.	Cedar	1889	1,150.00	48.00	50.00	1.25	.93	.02	4,147.73	3,870.14
6th st. S.	Hennepin av.	Nicollet av.	Cedar	1889	1,290.00	38.00	40.00	1.25	1.03½	.30	6,074.22	6,367.61
6th st. S.	Nicollet av.	1st av. S.	Cedar	1887	572.00	40.40	50.00	1.25	1.00	.25	5,528.56	5,763.68
6th st. S.	Hennepin av.	1st av. S.	Cedar	1883	330.00	40.40	50.00	1.25	.91	.42	2,566.07	2,522.58
6th st. S.	2d av. S.	3d av. S.	Cedar	1887	330.00	40.40	50.00	1.25	.94	.12	1,682.76	2,845.56
6th st. S.	Hennepin av.	2d av. S.	Cedar	1888	330.00	40.40	50.00	1.25	1.02½	.29	1,633.65	1,590.91
6th st. S.	Hennepin av.	3d av. S.	Cedar	1886	400.00	48.40	50.00	1.13	1.12	.30	1,038.18	1,292.85
7th st. S.	Hennepin av.	2d av.	Cedar	1887	1,340.00	38.00	40.00	1.25	.92	.02	6,708.25	6,191.85
7th st. S.	Hennepin av.	7th av.	Cedar	1885	2,032.00	38.00	40.00	1.75	1.24	2-10	9,513.08	12,625.25
3d av. N.	Washington av.	2d st.	Cedar	1886	680.00	44.20	50.00	1.25	1.13	.36	1,564.09	1,980.54
3d av. N.	Washington av.	2d st.	Cedar	1887		48.00	50.00	1.25	1.13	.36	1,814.06	2,196.98
3d av. N.	Washington av.	2d st.	Granite.	1883	744.00	48.00	50.00	2.75	2.52	.40	1,738.40	4,537.78
3d av. N.	Washington av.	6th st.	Cedar	1882		48.00	50.00	2.75	2.65	.40	2,418.35	6,643.13
3d av. N.	Washington av.	24th st.	Cedar	1887	8,165.00	38.00	40.00	1.25	.87	.30	37,627.59	35,301.69
3d av. N.	Main st.	University av.	Granite.	1887	740.00	54.00	56.00	2.30	1.79	.12	4,138.71	7,483.22

3d av. S. E.	University av.	Division st.	1888	2,380.21	38.00	40.00	1.25	1.03	2-5	23	11,731.02	12,946.25
3d st. N.	Hennepin av.	1st av.	1885	411.00	50.45	52.45	1.75	1.34	.30	.30	2,570.29	3,663.87
3d st. N.	Hennepin av.	3d av.	1886	820.00	50.45	52.45	1.30	1.11	.30	.30	2,570.29	3,663.87
3d st. S.	Hennepin av.	1st av.	1884	695.00	48.00	50.00	1.75	1.64	.42	.42	3,334.18	6,053.10
3d st. S.	Hennepin av.	6th av.	1886	2,050.00	48.00	50.00	1.30	1.10	.30	.30	10,730.12	5,703.10
3d st. S.	Hennepin av.	10th av.	1880	1,670.00	48.00	50.00	1.25	.98	.24	.24	12,385.95	12,385.95
3d st. S.	Hennepin av.	11th av.	1880	320.00	50.00	50.00	1.25	.98	.24	.24	10,730.12	10,730.12
10th av. S.	River.	R. R. bridge.	1887	1,000.00	24.75	26.75	2.20	1.70	.10	.10	3,955.50	7,000.41
10th av. S.	R. R. bridge.	2d st.	1887	320.00	48.00	50.00	1.25	1.07	.00 1/2	.00 1/2	1,734.50	1,856.81
10th av. S.	Washington av.	3d st.	1880	2,470.00	38.00	40.00	1.25	1.03	.30	.30	6,615.90	6,808.76
10th av. S. E.	University av.	Railroad	1888	4,402.00	32.00	34.00	1.25	1.03	.30	.30	19,156.51	20,335.37
10th st.	Hennepin av.	Angle	1888	600.00	38.00	40.00	1.25	.90 1/2	.30	.30	2,212.34	2,412.99
10th st.	Angle	Nicollet av.	1888	5,602.00	38.00	40.00	1.25	.93	.02	.02	26,387.93	24,622.87
12th st.	University av. S. E.	Chicago av.	1887	1,230.00	57.40	67.00	1.00	1.39	.50	.50	14,542.50	31,116.26
University av. S. E.	Central av.	1st av.	1887	1,230.00	57.40	67.00	1.30	1.34	.30	.30	3,505.70	4,963.99
University av. S. E.	1st av.	Brg. ov. St. P. & M. & M.	1882	4,930.30	53.30	63.50	1.00	.90	.....	.....	31,733.29	31,415.96
Washington av. N.	Hennepin av.	2d av.	1885	1,581.00	57.40	67.00	2.75	.51	.50	.50	492,113.10	492,113.10
Washington av. N.	Hennepin av.	3d av.	1882	3,056.00	54.40	64.00	2.75	.57	.12 1/2	.12 1/2	11,587.00	10,058.98
Washington av. S.	Hennepin av.	8th av.	1884	820.00	54.40	64.00	2.75	2.40	.30	.30	3,914.50	6,508.64
Washington av. S.	Hennepin av.	10th av.	1886	1,428.00	54.40	64.00	2.31	2.09	.30	.30	5,477.95	11,706.91
Washington av. S.	Hennepin av.	12th av.	1887	2,100.00	54.40	64.00	1.35	.91	.30	.30	9,193.56	8,775.40
Washington av. S.	Hennepin av.	Cedar av.	1886	32.40	38.00	38.42	1.30	1.09	.33	.33	7,462.00	8,861.49
Western av.	1st av. N.	R. R. bridge.	Totals	130,017.93	618,130.63	888,981.75	618,130.63	888,981.75	.....	.....	888,981.75	888,981.75

Summary of Table No. 3.

Cedar	.....	.....	.....	107,732.93	.....	.....	.....	.....	.....	.....	497,231.63	8581,562.75
Granite	.....	.....	.....	21,981.00	.....	.....	.....	.....	.....	.....	120,235.00	304,708.00
Asphalt	.....	.....	.....	304.00	.....	.....	.....	.....	.....	.....	673.00	1,711.00
Totals	.....	.....	.....	130,017.93	618,130.63	888,981.75	618,130.63	888,981.75	.....	.....	888,981.75	888,981.75

*Included in third line above. *City furnished blocks.

Table No. 2.

PAVING DONE DURING SEASON OF 1880.

All paving is done by contract, and all assessable property is assessed for the cost of paying that part of the street on which said property abuts. The general city pays for paving all street intersections and all parts of streets along property exempt from special assessments. The paving tax is paid in five yearly installments.

STREET.	FROM—	TO—	Kind.	Width paved— feet.	Width of road— feet.	Rate of assess- ment—per square yard.	CONTRACT PRICE.		Total length paved—feet.	Number of square yards.	Cost.	CONTRACTOR.
							Per square yard.	Extra exca- vate per cubic yard.				
Central avenue.	6th st.	7th st.	Ced'r	46.40	56.	1.25	1.02	.12	685.60	3,073.	\$3,180.18	J. B. Smith & Co.
1st avenue N.	3rd st.	4th st.	"	50.	50.	1.25	.98	.20	420.	2,407.34	2,566.06	Wm. Hendricks.
4th street N.	Hennepin av.	1st av.	"	48.	50.	1.25	1.00½	.24	333.30	1,810.03	1,972.07	T. J. Cunney.
5th street N.	1st av.	3rd av.	"	48.	50.	1.25	1.00	.12	640.	3,413.	3,519.56	J. B. Smith & Co.
14th avenue S-E.	4th av.	5th st.	"	32.	40.	1.25	1.05	.24	320.	1,100.50	1,303.79	J. B. Smith & Co.
Alley blk 42 Mpls.	1st av N. to main alley and 1st st.	to Ry	"	16.	16.	1.25	1.00	.30	440.50	762.42	827.08	
" 19 "	2nd av. S.	3rd av. S.	"	20.	23.	1.25	1.00	.30	330.40	732.	1,115.58	
" 20 "	1st av. S.	2nd av. S.	"	20.	20.	1.25	1.00	.30	330.40	347.41	418.06	
" 21 "	1st st.	2nd st.	"	16.	16.	1.25	1.00	.30	330.77	536.	614.24	
" 22 "	1st st. to 2nd st. and	1st av. N. to main alley	"	16.	16.	1.25	1.00	.30	408.03	870.78	1,001.63	
" 23 "	1st av. N.	2nd av. N.	"	16.	16.	1.25	1.00	.30	331.	693.83	716.72	
" 24 "	1st av. N.	2nd av. S.	"	16.	16.	1.25	1.00	.30	331.	695.59	704.80	
" 25 "	2nd st.	2nd av. S.	"	16.	16.	1.25	1.00	.30	331.10	672.97	706.03	
" 26 "	Washington av.	Washington av.	"	20.	20.	1.25	1.00	.30	357.	320.67	353.07	
" 27 "	Main alley.	Main alley.	"	20.	20.	1.25	1.00	.30	455.	894.03	991.89	
" 28 "	1st av. S.	2nd av. S.	"	20.	20.	1.25	1.00	.30	350.40	685.56	773.98	
" 29 "	2nd av. S.	3rd av. S.	"	20.	20.	1.25	1.00	.30	104.	252.	280.08	
" 30 "	(Bovey sub.) 3rd st.	toward Wash. av.	"	12.	12.	1.25	1.00	.30	34.24			D. A. Thatcher.
" 31 "	3rd av. S.	4th av. S.	"	18.	18.	1.25	1.00	.30	330.40	718.43	829.81	
" 32 "	4th av. S.	3rd av. S.	"	20.	20.	1.25	1.00	.30	330.40	1,075.63		
" 33 "	(Noble's sub.) 3rd av.	3rd av.	"	14.	14.	1.25	1.00	.30	352.	954.34		
" 34 "	3rd st. N.	4th st. N.	"	16.	16.	1.25	1.00	.30	341.76	694.41	687.92	
" 35 "	1st av. S.	2nd av. S.	"	20.	20.	1.25	1.00	.30	330.40	434.18	439.29	
" 36 "	2nd av. S.	3rd av. S.	"	20.	20.	1.25	1.00	.30	330.40	694.32	756.80	
" 37 "	3rd av. S.	4th av. S.	"	20.	20.	1.25	1.00	.30	330.40	928.	1,013.43	
" 38 "	4th av. S.	Main alley.	"	12.25	12.25	1.25	1.00	.30	155.30			
" 39 "	4th av. S.	5th av. S.	"	16.	16.	1.25	1.00	.30	264.	618.34	743.91	
" 40 "	Nic. av. to alley and	alley to 4th st.	"	15.10	15.10	1.25	1.00	.30	66.			
" 41 "	4th to 5th st. N. and	1st av. N. to main alley	"	16.	16.	1.25	1.00	.30	264.	556.	624.38	
" 42 "	River.	6th st.	"	12.	12.	1.25	1.00	.30	220.			
Plymouth ave.	6th st.	Lyndale av.	"	40.	42.	1.25	1.00	.30	490.92	954.14	1,080.95	Wm. Hendricks.
6th avenue S.	7th st.	10th st.	"	42.	42.	1.25	.98	.09	2,440.50	15,634.	15,444.08	Jas. Forestal.
3rd street S.	6th st.	10th av.	"	38.	40.	1.25	1.00	.25	1,220.	5,528.56	5,763.48	J. B. Smith & Co.
3rd street S.	10th av.	11th av.	"	48.	50.	1.25	.98	.24	1,070.	10,785.	10,970.58	
3rd street S.	10th av.	11th av.	"	50.	50.	1.25	.98	.24	320.			

Table No. 5.
PAVING TO BE DONE DURING THE YEAR 1890.

STREET.	FROM—	TO—	Kind.	Width to be paved, feet.	Width of roadway, feet.	Rate of assessment per square yad.	CONTRACT PRICE.		Length, feet.	Estimated sq. yds.	Estimated cost.	City's portion.	CONTRACTOR.
							Sq. yd. paving.	Extra excavation.					
10th avenue S.....	Washington av. N	3rd st.....	"	48.	50.	1.00	1.00	1.07	.00%	320.	1,734.50	\$1,856.81	J. B. Smith & Co.
				{ 48.40 58.	{ 50. 58.	1.00	1.00						
Washington av. N	5th av.....	18th av.....	"	53.75 53.90 63.50	63.50	1.25	.99			4,930.30	31,733.29	31,415.96	Wm. Hendricks.
				{ 57.40 64. 67.								1,214.78	
Incidentals				{ 58.40 67.						21,880.12	90,993.64	94,988.52	
Streets										14,064.70	77,318.22	78,965.20	Streets, miles, 2.6637
Alleys										7,815.42	13,675.42	16,023.32	Alleys, miles, 1.4892
										21,880.12	90,993.64	94,988.52	Total miles, 4.1439

STREET.	FROM—	TO—	Kind.	Width to be paved, feet.	Width of roadway, feet.	Rate of assessment per square yad.	CONTRACT PRICE.		Length, feet.	Estimated sq. yds.	Estimated cost.	City's portion.	CONTRACTOR.
							Sq. yd. paving.	Extra excavation.					
Cedar av.....	5th st.....	6th st.....	Cedar	40.40	50	1.05	1.02	.12	492	2,210.82	2,331.36	641.50	J. B. Smith & Co.
11th av. S.....	7th st.....	Franklin av.....	"	40.	40	1.05	.92		3,280	14,609.76	15,340.25	3,573.78	J. B. Smith & Co.
11th st. N.....	Nicollet av.....	6th av.....	"	40.	40	1.05	.99	.09	2,152	9,186.49	9,643.81	1,493.25	James Forrestal.
1st av. N.....	4th st.....	Western av.....	"	50.	50	1.05	.98	.20	1,230	6,846.30	7,188.61	1,291.34	Wm. Hendricks.
Main st. NE.....	Central av.....	4th av.....	"	54.	56	1.05	.95		1,748	11,212.63	11,773.26	1,961.00	James Forrestal.
Alley block 624th	st. towards 3d st.	near Nicollet av.	Asphalt	18.	18	2.55			165	330.00	841.50	.....	Not let.
9th st. S.....	Hennepin av.....	3rd av. S.....	Cedar	{ 32. 48.	{ 34 50	1.05	.99	.24	2,019	8,290.12	8,704.63	855.29	J. B. Smith & Co.
6th av. N.....	Lyndale av.....	Humboldt av.....	"	38.	40	1.05	.93		2,713	11,450.66	12,023.19	4,163.68	James Forrestal.
6th st. N.....	Hennepin av.....	1st av. N.....	"	45.	45	1.05	1.01 1/2	.24	320	1,600.00	1,680.00	.....	Thos. J. Canney.
10th av. N.....	1st st.....	Washington av.....	"	50.	50	1.05	.86 1/2		776	3,441.55	3,613.63	1,167.50	J. B. Smith & Co.
10th av. SE.....	7th st.....	8th st.....	"	38.	40	1.05	.89		450	1,981.77	2,080.86	615.66	James Forrestal.
20th av N.....	2nd st.....	Bryant av.....	"	{ 64. 56.40	{ 64 64	1.05	.87		3,093	18,138.49	19,045.41	5,249.92	James E. Snyder.
Washington av. N	18th av.....	20th av.....	"	48.40	56	1.25	.99		877	5,864.20	5,805.56	297.50	Wm. Hendricks.
Western av.....	R. R. bridge near	12th st. Irving av.	"	59.40	67	1.05	.84		3,848	17,084.22	17,998.43	5,343.22	J. B. Smith & Co.
				32.74	42				23,163	112,247.01	118,012.50	26,593.91	Total miles, 4.3899.

Table No. 6.

CURB AND GUTTER STONE SET PREVIOUS TO JANUARY 1, 1890.

STREET.	FROM—	TO—	Kind.	Rate of as- essment.	Contract price.	Length—ft.	Cost.	Year work done.
Bank st.	Pierce st.	Ortman st.	Kettle River.	1.00	\$.97½	616.80	\$601.38	1888
Bank st.	Ortman st.	University av	"	1.00	.97½	356.90	354.00	1887
Bridge square.	1st st.	Union Ry. br.	"	1.40	1.35	497.25	671.28	1884
Bridge square.	1st st.	E. end city hall	Limestone	1.70	1.70	363.00	617.10	1882
Bridge st.	Suspension br	Stone Arch br	"	1.70	1.70	1,109.95	1,886.91	1882
Cedar av	Wash. av.	6th st.	Kettle River.	1.00	.97½	3,344.50	3,260.99	1887
Cedar av	6th st. S.	7th st. S.	"	1.10	1.10	671.50	738.65	1889
Cedar av	W. av. w Cedar	W. av. e Cedar	"	1.00	.97½	129.20	125.97	1888
Central av	Stone Arch br	4th st.	Limestone	1.70	1.70	2,348.00	3,991.60	1883
Central av	4th st.	6th st.	"	1.15	1.14	1,524.40	1,737.82	1886
Central av	6th st.	8th st.	Kettle River.	1.00	.97½	1,479.20	1,487.51	1888
Central av	8th st.	9th st.	"	1.10	1.10	320.10	352.11	1889
Clinton av.	12th st.	Franklin av.	"	1.10	1.10	5,068.70	5,575.57	1888
8th av. S.	Wash. av.	3d st.	Limestone	1.30	1.26	800.00	1,008.00	1886
8th st.	Hennepin av.	Nicollet av.	"	1.15	1.14	1,533.00	1,747.62	1886
8th st.	Nicollet av.	3d av. S.	Kettle River.	1.00	.97½	7,047.00	7,018.94	1888
8th st.	4th av. S.	11th av. S.						
8th st S.	10th av.	11th av.	"	1.10	1.10	169.30	186.23	1889
8th st.	3d av. S.	4th av. S.	"	1.00	.97½	709.30	720.62	1887
8th st.	11th av. S.	13th av. S.	"	1.10	1.10	1,573.70	1,731.07	1888
11th av. S.	8th st.	Franklin av.	"	1.10	1.10	4,861.00	5,348.20	1888
1st av. N.	1st st.	R. R. bridge.	"	1.10	1.10	277.60	305.36	1888
1st av. N.	1st st.	2d st.	Limestone	1.30	1.26	694.20	874.69	1885
1st av. N.	2d st.	3d st.	"	1.40	1.35	1,298.64	1,753.16	1884
1st av. N.	3d st.	4th st.	"	1.30	1.26	745.60	939.45	1885
1st av. S.	1st st.	3d st.	"	1.40	1.35	2,000.00	2,700.00	1886
1st av. S.	3d st.	6th st.	"	1.15	1.14	1,836.50	2,063.61	1884
1st av. S.	6th st.	8th st.	"	1.15	1.14	1,515.80	1,728.01	1886
1st st.	1st av. N.	3d av. N.	"	1.30	1.35	1,500.00	2,025.00	1884
1st st. N.	9th av.	10th av.	Kettle River.	1.10	1.10	60.80	66.88	1889
1st st.	1st av. N.	5th av. S.	Limestone	1.40	1.35	4,566.00	6,164.10	1884
1st st.	5th av. S.	Canal	"	1.30	1.35	249.80	337.23	1884
1st av. S. E.	Main st.	5th st.	Kettle River.	1.00	.97½	2,547.80	2,516.44	1888
4th av. S.	Wash. av.	4th st.	Limestone	1.30	1.26	1,550.00	2,173.00	1885
4th st. N.	Hennepin av.	3d av. N.	Kettle River.	1.00	.97½	1,814.30	1,899.06	1887
4th st. N.	Hennepin av.	1st av. N.	"	1.00	.97½	96.30	93.80	1888
4th st. S.	Hennepin av.	Nicollet av.	Limestone	1.40	1.35	747.00	1,008.45	1884
4th st. S.	Nicollet av.	2d av.	"	1.15	1.14	1,246.20	1,420.67	1886
4th st. S.	2d av.	8th av.	"	1.15	1.14	4,457.50	5,081.55	1886
4th st. N. E.	Central av.	6th av.	Kettle River.	1.00	.97½	4,419.90	4,527.19	1887
4th st. S. E.	Central av.	14th av.	"	1.10	1.00	10,922.90	12,015.19	1888
5th av. S.	Wash. av.	3d st.	Limestone	1.15	1.14	612.60	698.36	1886
5th st.	Hennepin av.	1st av. N.	"	1.30	1.35	1,743.00	2,353.05	1884
5th st.	Hennepin av.	Nicollet av.	"	1.40	1.35			
5th st. S.	Nicollet av.	1st av.	"	1.10	1.35	660.00	891.00	1884
5th st. S.	1st av.	3d av.	Kettle River.	1.00	.97½	1,223.20	1,240.99	1888
5th st. N. E.	Central av.	1st av. N. E.	"	1.10	1.10	360.50	396.55	1888
5th st. N. E.	2d av.	4th av.	Artificial	1.10	1.10	735.50	809.05	1888
5th st. N. E.	2d av.	Wash. st.	Kettle River.	1.10	1.10	735.50	803.05	1889
5th st. S. E.	Central av.	14th av.	"	1.10	1.10	10,362.10	11,398.31	1888
14th st.	Chicago av.	11th av. S.	"	1.10	1.10	1,971.80	1,953.79	1888
14th av. S. E.	4th st.	5th st.	Artificial ..	1.10	1.10	660.00	726.00	1888
Harmon place.	10th st.	11th st.	Kettle River.	1.10	1.10	488.10	536.91	1888
Hennepin av.	E. end city hall	4th st.	Limestone	1.70	1.70	2,555.25	4,343.92	1883
Hennepin av.	4th st.	9th st.	"	1.40	1.35	4,123.40	5,566.59	1884
Hennepin av.	9th st.	Spruce place.	"	1.40	1.35	3,783.58	5,107.83	1884
Hennepin av.	Spruce place.	Oak Grove st.	Kettle River.	1.00	.97½	4,119.40	4,026.09	1888
High st.	Bridge square	1st av. S.	Limestone	1.30	1.26	363.00	457.38	1885
Highland av.	Royalton av.	Lyndale av.	Granolithic.	1.10	.90	3,262.60	2,936.34	1889
Main st.	Central av.	6th av. N. E.	Kettle River.	1.00	.97½	3,254.00	3,611.96	1887
Main st.	Central av.	2d av. N. E.	"	1.00	.97½	2,819.80	2,755.33	1887
Marshall st.	5th av. N. E.	8th av. N. E.	"	1.00	.97½	2,323.70	2,298.57	1888
Nicollet av.	E. end city hall	5th st.	Limestone	1.70	1.70	3,276.00	5,569.20	1883
Nicollet av.	5th st.	9th st.	"	1.40	1.35	3,032.00	4,093.20	1884
Nicollet av.	9th st.	12th st.	"	1.30	1.26	2,400.00	3,024.00	1885
Nicollet av.	12th st.	13th st.	"	1.15	1.14	713.10	812.93	1885
Nicollet av.	13th st.	Franklin av.	Kettle River.	1.00	.97½	5,877.30	5,814.71	1888
9th st. S.	Hennepin av.	Nicollet av.	"	1.00	.97½	1,761.30	1,749.53	1888
9th st. S.	6th av.	7th av.	"	1.00	.97½	6,110.20	6,185.86	1887
9th st. S.	Nicollet av.	6th av.	"	1.00	.97½	1,981.90	1,932.35	1888
9th st. S.	7th av. S.	9th av.	"	1.00	.97½	660.80	591.63	1887
Oak Grove st.	Clifton place.	Spruce place.	"	1.00	.97½	615.30	606.91	1888
Ortman st.	Central av.	Bank st.	"	1.00	.97½	660.80	591.63	1887
Ortman st.	Bank st.	1st av. S. E.	"	1.00	.97½	615.30	606.91	1888
Park av	10th st.	25th st.	"	1.00	.97½	8,421.70	8,492.83	1888

Table No. 6—Continued.

STREET.	FROM—	TO—	Kind.	Rate of ass'm't.	Contract price.	Length —ft.	Cost.	Yr. work done.
Parks in Oak..	Lake addit'n.		*Granolithic.	.... .90		696.40	626.76	1889
Plymouth av.	6th st.	Bridge.	Limestone....	1.15 1.14		5,005.10	5,705.81	1886
Plymouth av.	6th st.	Lyndale av.	Kettle River.	1.10 1.10		629.60	602.56	1889
Princeton.	Central av.	Bank st.	"	1.00 .97½		853.30	831.96	1888
Portland av.	Grant st.	Lake st.	+P.Com.C.&G.	.... .76 75		15,962.00	11,971.50	1889
Rollins st.	4th av. N. E.	5th av. N. E.	Kettle River.	1.00 .97½		1,134.40	1,179.61	1888
Royalston av.	R. R. bridge.	6th av. N.	Granolithic....	1.10 .90		4,046.20	3,641.58	1889
2d av. N.	1st st.	2d st.	Kettle River.	.... 1.35		716.00	966.60	1887
2d av. N.	2d st.	3d st.	Limestone....	1.40 1.35		1,298.64	1,753.16	1884
2d av. S.	1st st.	4th st.	"	1.40 1.35		2,684.00	3,623.40	1884
2d av. S.	4th st.	13th st.	"	1.30 1.26		8,850.00	11,151.00	1885
2d st.	3d av. N.	4th av. S.	"	1.40 1.35		4,495.10	6,675.88	1884
6th av. N.	Bank st.	8th av. N. E.	Kettle River.	1.00 .97½		6,494.50	6,658.40	1888
6th av. N.	Wash. av.	6th st.	"	1.10 1.10		2,886.50	3,175.15	1889
6th av. N.	Oak Lake av.	Bradford av.	"	1.10 1.10		134.00	147.40	1889
6th av. N.	5th st.	James av.	"	1.10 1.10		9,069.10	9,976.01	1888
6th av. N.	Humboldt av.	James av.	"	1.10 1.10		371.60	498.76	1889
6th av. S.	2d st.	Canal.	Limestone....	1.30 1.26		480.00	604.80	1885
6th av. S.	Wash. av.	4th st.	"	1.15 1.14		1,291.60	1,472.42	1886
6th av. S.	4th st.	10th st.	Kettle River.	1.00 .97½		3,781.60	3,810.89	1888
6th st. S.	Hennepin av.	Nicollet av.	Limestone....	1.40 1.26		1,144.00	1,441.44	1885
6th st.	Nicollet av.	1st av. S.	"	1.40 1.35		760.00	1,026.00	1884
6th st. S.	1st av.	2d av.	Kettle River.	1.00 .97½		455.40	444.02	1887
6th st. S.	2d av.	3d av.	"	1.10 1.10		668.50	735.35	1888
6th st. S.	3d av.	6th av.	"	1.10 1.10		2,217.40	2,439.14	1889
7th av. S.	Wash. av.	7th st.	"	1.10 1.10		3,449.90	3,794.89	1888
7th st. N.	Hennepin av.	1st av.	Limestone....	1.15 1.14		727.10	828.89	1886
7th st. S.	Hennepin av.	2d av.	Kettle River.	1.00 .97½		1,806.60	1,800.15	1887
7th st. S.	2d av.	7th av.	Limestone....	1.30 1.26		3,840.00	4,838.40	1885
7th st.	Central av.	3d av. N. E.	Kettle River.	1.00 .97½		1,210.90	1,220.73	1888
3d av. N.	1st st.	2d st.	Limestone....	1.30 1.26		754.20	950.29	1885
3d av. N.	2d st.	3d st.	"	1.40 1.35		1,614.08	2,179.00	1884
3d av. S.	1st st.	2d st.	"	1.30 1.35		663.00	895.05	1884
3d av. S.	2d st.	Wash. av.	"	1.70 1.70		610.00	1,037.00	1883
3d av. S.	Wash. av.	7th st.	"	1.15 1.14		3,100.70	3,660.20	1886
3d av. S.	7th st.	24th st.	"	1.00 .97½		10,447.60	10,358.47	1886
3d av. N. E.	Main st.	2d st.	Kettle River.	1.00 .97½	5,622.20	5,778.65	1888	
3d av. N. E.	6th st.	Harrison st.						
3d av. N. E.	2d st.	6th st.	"	1.00 .97½	1,307.00	1,283.08	1887	
3d av. S. E.	Main st.	University av	"	1.00 .97½	1,075.20	1,048.32	1887	
3d av. S. E.	University av	Division st.	"	1.10 1.10	4,648.10	5,112.91	1888	
3d st.	4th av. N.	3d av. S.	Limestone....	1.40 1.35	2,242.67	3,027.60	1884	
3d st. S.	3d av.	6th av.	"	1.40 1.26	5,980.46	7,535.38	1885	
3d st. S.	6th av.	10th av.	"	1.15 1.14	2,664.90	3,037.99	1886	
10th av. N.	1st st.	2d st.	Kettle River.	1.10 1.10	23.90	26.29	1889	
10th av. S.	3d st.	Bridge.	Limestone....	1.15 1.14	2,112.30	2,408.02	1886	
10th av. S.	3d st.	14th st.	Kettle River.	1.10 1.10	4,418.30	4,860.13	1888	
10th av. S. E.	University av	5th st.	"	1.00 .97½	3,254.10	3,238.82	1888	
10th av. S. E.	6th st.	8th st.						
10th av. S. E.	5th st.	6th st.	"	1.00 .97½	382.90	381.17	1887	
10th st.	Hennepin av.	Nicollet av.	"	1.00 .97½	4,444.30	4,489.50	1888	
10th st.	5th av. S.	Chicago av.	"	1.00 .97½	3,254.00	3,267.08	1887	
10th st.	Nicollet av.	6th av. S.	"	1.00 .97½	3,254.00	3,267.08	1887	
12th st.	2d av. S.	Clinton av.	"	1.10 1.10	1,034.90	1,138.39	1888	
24th st.	Stevens av.	3d av. S.	"	1.10 1.10	1,234.30	1,357.73	1889	
Univ. av. N. E.	5th av.	6th av.	"	1.10 1.10	587.20	645.92	1889	
University av.	Central av.	5th av. N. E.	"	1.00 .97½	3,686.30	3,753.11	1888	
University av.	Central av.	Bridge.	"	1.00 .97½	10,693.30	10,688.96	1887	
Wash'gton av.	2d av. N.	3d av. N.	Limestone....	1.30 1.26	860.00	1,083.60	1885	
Wash'gton av.	4th av. N.	14th av. N.	"	1.15 1.14	6,006.90	6,847.87	1886	
Wash'gton av.	14th av. N.	19th av. N.	Kettle River.	1.10 1.10	3,469.90	3,816.89	1889	
Wash'gton av.	2d av. N.	8th av. S.	Limestone....	1.70 1.70	7,761.90	13,195.23	1882	
Wash'gton av.	8th av. S.	10th av. S.	"	1.30 1.26	1,552.00	1,955.52	1885	
Western av.	R. R. bridge.	Irving av.	+P.Com.C.&G.	.81 .80	5,340.00	4,272.00	1889	
Wash'gton av.	10th av. S.	11th av. S.	Limestone....	1.15 1.14 }	3,901.00	4,447.14	1885	
Wash'gton av.	11th av. S.	Cedar av.	"	1.15 1.14 }				
Western av.	1st av. N.	R. R. bridge.	"	1.15 1.14	3,630.50	4,138.77	1886	
Curb corners. Catch basin covers.			Price.					
49			\$11.00				539.00	....
193			9.00				1,737.00	....
376			8.00				3,008.00	....
67.05 miles.			6				102.00	....
			86				1,376.00	....
			156				2,184.00	....
			200				2,600.00	....
			139				1,668.00	....
Totals....			618	587		354,019.82	\$400,357.18	

*Not assessed.

+Parkhurst's Combined C. & G.

Table No. 7.

CURB AND GUTTER SET DURING THE SEASON OF 1889.

STREET.	FROM—	TO—	KIND.	Rate of assessment per lineal foot.	Contract price per lineal foot.	Length, feet.	Cost.
Cedar av.....	6th av. S.....	7th st. S.....	Kettle river stone	1.10	1.10	671.5	738.65†
Central av.....	8th st.....	9th st.....	" "	1.10	1.10	320.1	352.11†
8th st. S.....	10th av.....	11th av.....	" "	1.10	1.10	169.3	186.23†
1st st. N.....	9th av.....	10th av.....	" "	1.10	1.10	60.8	66.88†
5th st. N. E.....	2nd av.....	Wash'ton st.....	" "	1.10	1.10	735.5	809.05†
Highland av.....	Royalston av.....	Lyndale av.....	Granolithic.....	1.10	.90	3,262.6	2,936.34†
Parks in Oak	Lake addition		Granolithic.....	*	.90	606.4	626.76†
Plymouth av.....	6th st.....	Lyndale av.....	Kettle river stone	1.10	1.10	629.6	692.56†
Portland av.....	Grant st.....	Lake st.....	Parkhust Combi- nation C & G....	.76	.75	15,962	11,971.50‡
Royalston av.....	R. R. bridge.....	6th av. N.....	Granolithic.....	1.10	.90	4,046.2	3,641.58†
6th av. N.....	Wash'ton av.....	6th st.....	Kettle river stone	1.10	1.10	2,886.5	3,175.15†
6th av. N.....	Humboldt av.....	James av.....	" "	1.10	1.10	371.6	408.76†
6th av. N.....	Oak Lake av.....	Bradford av.....	" "	1.10	1.10	134	147.40†
6th st. S.....	3rd st.....	6th av.....	" "	1.10	1.10	2,217.4	2,439.14†
10th av. N.....	1st st.....	2nd st.....	" "	1.10	1.10	23.9	26.29†
24th st.....	Stevens av.....	3rd av. S.....	" "	1.10	1.10	1,234.3	1,357.73†
Univ. av N. E.....	5th av.....	6th av.....	" "	1.10	1.10	587.2	645.92†
Wash'n av. N.....	14th av.....	19th av.....	" "	1.10	1.10	3,469.9	3,816.89†
Western av.....	R. R. bridge.....	Irving av.....	Parkhust Combi- nation C & G....	.81	.80	5,340	4,272.00‡
Incidentals.....							3,347.10
8.111 miles.			Total			42,818.8	47,658.04
On various streets gutter	stone to complete contract of	1887.....				30,000	6,000.00

*Not assessed.

†No gutters.

‡Curb and gutter.

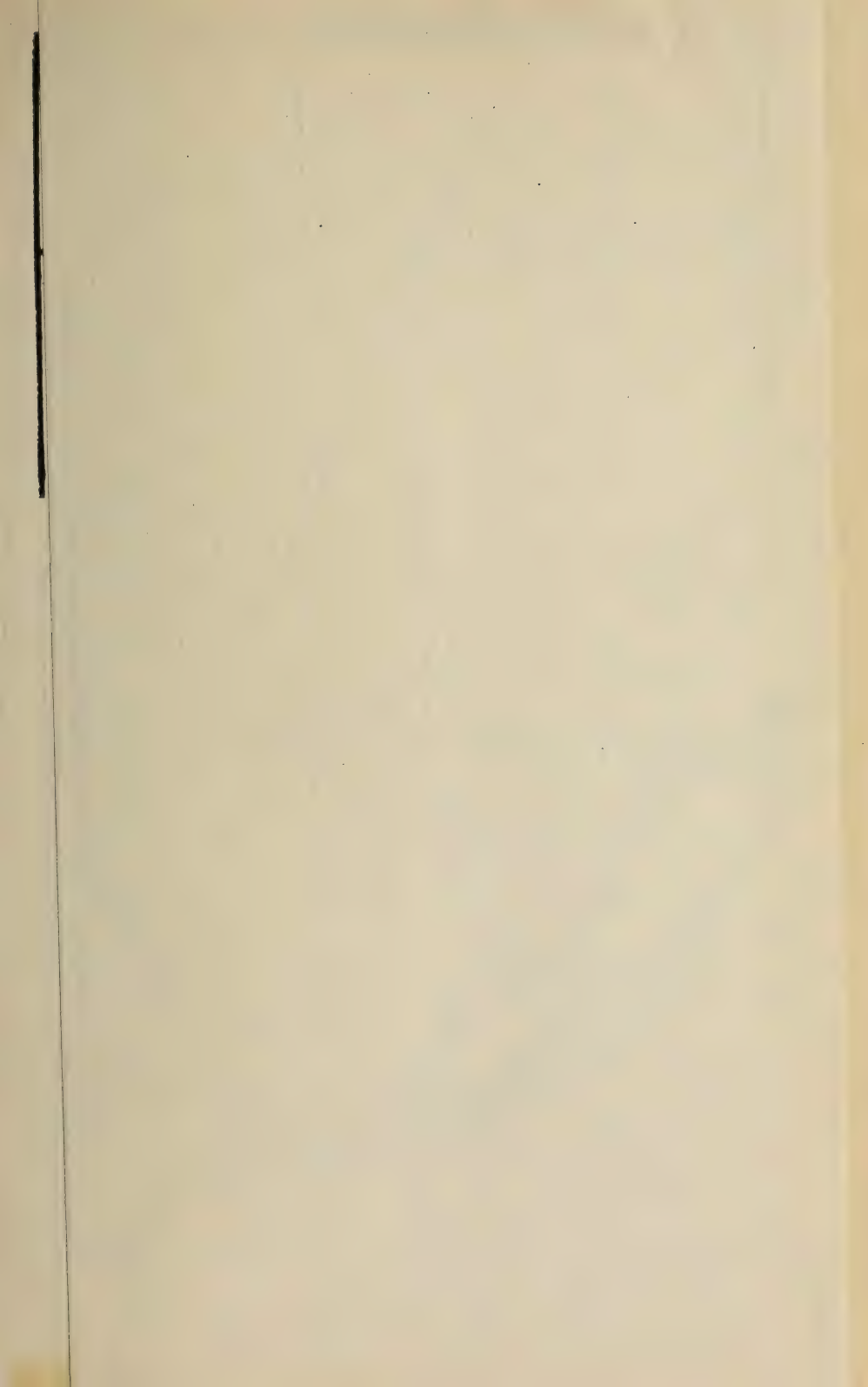
Table No. 8.

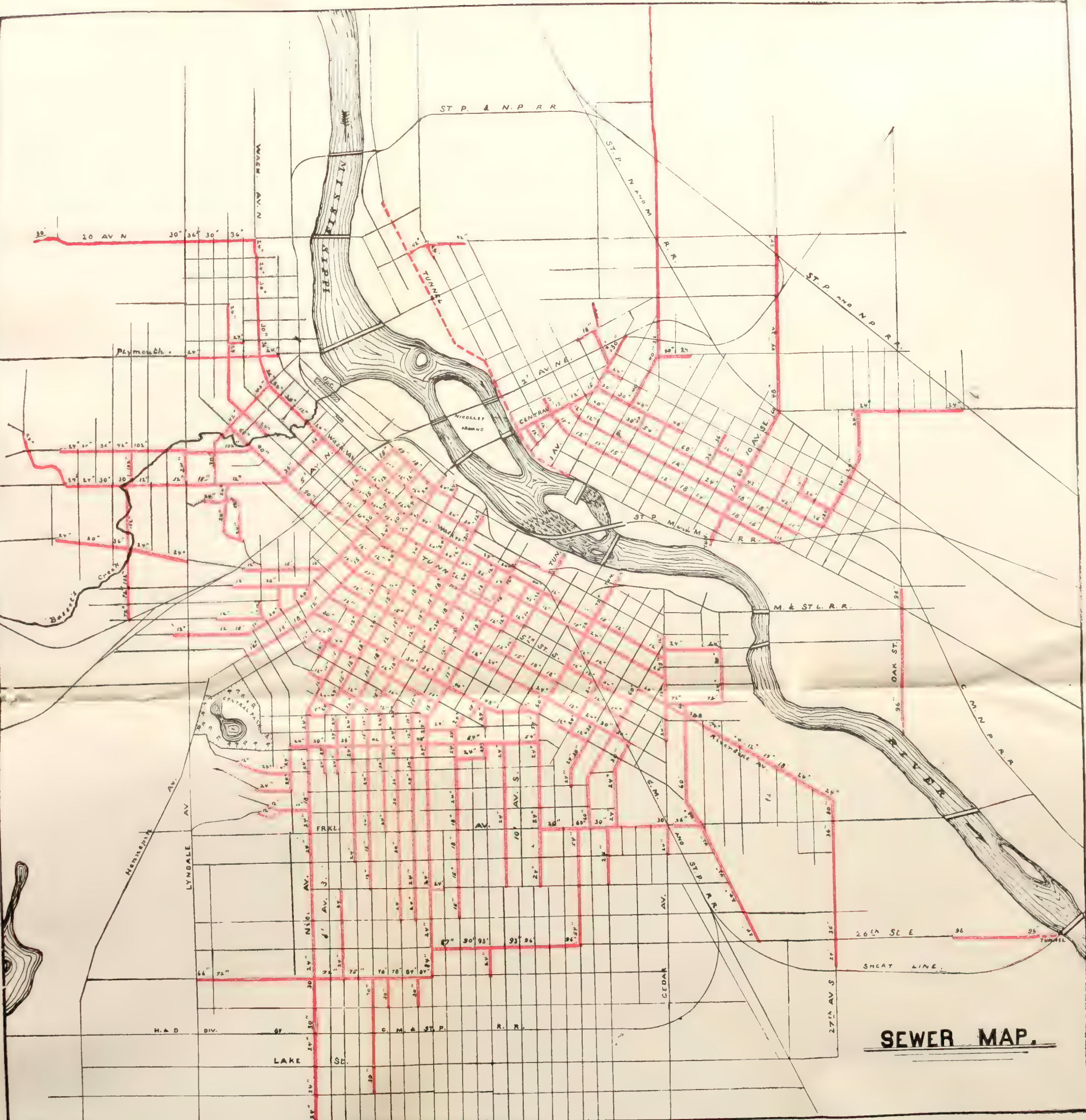
CURB TO BE SET DURING SEASON OF 1890.

Assessed at \$1.10 per lineal foot, except Western avenue, which was assessed at 81 cents.

All curb put in by the city is furnished and set by contract, and all assessable property is assessed by the front foot for its exact frontage on the street where curb is put in. The general city pays the cost of curb around corners and in front of property exempt from special assessments. The tax for curb is paid in five yearly installments.

STREET.	FROM—	TO—	Estimated length— feet.	ESTIMATED COST.		
				Total.	City's proport'n	Prop'rt'y's proport'n
Central av.....	9th st.....	10th st.....	786	864.60	254.65	609.95
8th av. N.....	Oak Lake av.....	Lyndale av.....	1,198	1,317.80	56.10	1,261.70
8th av. N. E.....	University av.....	7th st.....	2,880	3,168.	232.10	2,935.90
11th av. S.....	7th st.....	8th st.....	820	902.	176.	726.
11th st. S.....	Nicollet av.....	6th av.....	3,843	4,227.30	394.90	3,832.40
Franklin av.....	10th av. S.....	Minnehaha av.....	7,577	8,335.23	1,426.35	6,908.88
1st av. N.....	4th st.....	Western av.....	2,124	2,336.40	114.84	2,221.56
1st av. N. E.....	Main st.....	5th st.....	2,700	2,970.	66.	2,904.
5th st. N. E.....	Central av.....	4th av. (E. side).....	1,544	1,698.40	52.91	1,645.49
Hawthorn av.....	9th st. N.....	Lyndale av.....	5,728	6,300.80	1,206.70	5,094.10
Main st. N. E.....	2nd av.....	4th av. (W. side).....	850	935.	24.20	910.80
Marshall st.....	8th av. N. E.....	14th av. N. E.....	4,834	5,321.80	595.87	4,725.93
Minnehaha av.....	Cedar av.....	Franklin av.....	2,015	2,216.50	358.60	1,857.90
Park av.....	25th st.....	28th st.....	4,022	4,424.20	573.43	3,850.77
6th av. N. E.....	Marshall st.....	Main st.....	685	753.50	27.50	726.
10th av. N.....	1st st.....	Washington av.....	1,418	1,559.80	474.87	1,084.93
10th st. N. E.....	Central av.....	3rd av.....	403	443.52	88.	355.52
20th av. N.....	2nd st.....	Bryant av.....	5,505	6,055.50	1,028.72	5,026.78
Vine place.....	Oak Grove st.....	19th st.....	1,674	1,741.40	184.90	1,556.50
Western av.....	Colfax av.....	Emerson av.....	2,865	2,320.65	387.14	1,933.51
10.675 miles.		Total.....	53,475	57,892.40	7,723.78	50,168.62





SEWER MAP.

Table No. 9.

SEWERS CONSTRUCTED PREVIOUS TO JANUARY 1st, 1890.

STREET.	FROM—	TO—	Size in inches.	Kind.	Shape.	Length in feet.
Bloom'ton av.	Franklin av.	24th st.	24	Brick	Egg	1,311.
Broadway av.	11th av. N. E.	Univers'y av.	42	Brick & concrete.		906.2
Cedar av.	Wash'ton av.	2nd st.	12	Cement	Oval	494.3
Cedar av.	3rd st.	Wash'ton av.	15	"	"	495.2
Cedar av.	3rd st.	4th st.	18	"	"	461.0
Cedar av.	4th st.	5th st.	24	Brick	Egg	524.4
Cedar av.	5th st.	6th st.	24	"	"	358.4
Cedar av.	Franklin av.	22nd st.	24	"	"	642.5
Central av.	Draft at river	4th st.	15	Cement	Oval	1,218.
Central av.	4th st.	5th st.	12	"	"	415.8
Central av.	5th st.	6th st.	15	"	"	425.
Central av.	6th st.	9th st.	30	Brick	Egg	1,335.1
Chicago av.	9th st.	10th st.	24	"	"	411.9
Chicago av.	15th st.	16th st.	24	"	"	309.3
Chicago av.	26th st.	27th st.	24	"	"	647.3
Clinton av.	Grant st.	15th st.	24	"	"	570.4
Clinton av.	15th st.	17th st.	30	"	"	644.3
Clinton av.	17th st.	Franklin av.	24	"	"	1,307.1
Clinton av.	27th st.	28th st.	30	"	"	646.6
Clifton av.	Vine Place, W.	side lt. 17. blk. 3, Hillside	24	"	"	716.7
Como av.	15th av. S. E.	23rd av S. E.	24	"	"	1,447.2
Division st.	3rd av. S. E.	Tyler st.	30	"	"	355.7
Division st.	Tyler st.	Polk st.	24	"	"	334.4
Dupont av.	St. P. & M. Ry.	1st av N.	72	Brick and stone		646.5
Dupont av.	1st av. N.	8th av. N.	8.5x6	"	"	3,087.8
Elwood av.	6th av. N. S. W.	side Barns' park, 10av. N.	24	Brick	Egg	1,851.
8th av. N.	Bassetts' crk.	Lyndale av.	90	"	Circular	1,243.6
8th av. N.	260 ft. W. of Lyndale av.	Dupont av.	8.5x6	"	"	1,448.1
8th av. N.	Dupont av.	Emerson av.	24 {	"	Egg	393.7
8th av. N.	Emerson av.	Fremont av.	42 {	"	"	396.8
8th av. N.	Fremont av.	Humboldt av.	36	"	"	661.6
8th av. N.	Humboldt av.	Irving av.	30	"	"	403.1
8th av. S.	Wash'ton av.	3rd st.	36	"	"	350.6
8th av. S.	3rd st.	4th st.	15	Cement	Oval	420.9
8th av. S.	5th st.	6th st.	24	Brick	"	42.
8th av. S.	5th st.	6th st.	12	Cement	"	311.4
8th av. S.	9th st.	10th st.	15	"	"	406.9
8th av. S. E.	5th st.	7th st.	36	Brick	Egg	817.3
8th av. S.	Mary Place.	Hennepin av.	12	Cement	Oval	443.7
8th av. S.	Mary place.	Nicollet av.	12	"	"	239.7
8th av. S.	12th av.	14th av.	12	"	"	786.3
11th av. N. E.	Broadway st.	Marshall st.	42	Brick	Egg	367.3
11th av. S.	Well by 1st st.	3rd st.	72	"	"	1,144.5
11th av. S.	3rd st.	8th st.	60	"	"	2,038.
11th av. S.	8th st.	15th st.	54	"	"	645.4
11th av. S.	15th st.	24th st.	24	"	"	3,199.1
11th st. N.	1st av. N.	Hawthorne av.	12	Pipe	Oval	600.2
11th st. S.	3rd av. S.	4th av. S.	12	"	"	350.2
11th st. S.	4th av. S.	5th av. S.	12	"	"	356.2
Franklin av.	11th av. S.	12th av. S.	30	Brick	Egg	200.
Franklin av.	12th av. S.	13th av. S.	33	"	"	330.4
Franklin av.	13th av. S.	14th av. S.	36	"	"	339.4
Franklin av.	14th av. S.	15th av. S.	60	"	"	221.2
Franklin av.	15th av. S.	16th av. S.	30	"	"	747.3
Franklin av.	16th av. S.	Cedar av.	30	"	"	919.8
Franklin av.	Min'ehaha av	Cedar av.	36	"	"	751.5
1st av. N.	1st st.	2nd st.	12	Cement	Oval	411.
1st av. N.	Wash'ton av	3rd st.	24	Brick	Egg	424.6
1st av. N.	3rd st.	9th st.	30	Brick	Egg	2,187.2
1st av. N.	9th st.	11th st.	15	Cement	Oval	725.6
1st av. N.	11th st. 150 feet	to rds 12th st.	12	"	"	554.9
1st av. N.	194.2 feet w. of	343.7 ft. to rds	12	"	"	149.4
1st av. S.	12th st.	12th st.	12	"	"	239.7
1st av. S.	1st st.	High st.	12	"	"	400.
1st av. S.	1st st.	2nd st.	24	"	"	1,029.
1st av. S.	2nd st. to ½ w'y	bet. 3rd & 4th.	24	Brick	Circular	193.5
1st av. S.	½ way bet. 3rd	& 4th sts. to 4th	24	Brick	Egg	1,126.7
1st av. S.	4th st.	7th st.	15	Cement	Oval	763.
1st av. S.	7th st.	9th st.	24	Brick	Egg	831.4
1st av. S.	9th st.	11th st.	18	Cement	Oval	461.5
1st av. S.	11th st.	12th st.	15	Cement	Oval	309.5
1st av. S.	12th st.	13th st.	24	Brick	Egg	

Table No. 9.—Continued.

SEWERS CONSTRUCTED PREVIOUS TO JANUARY 1st, 1890.

STREET.	FROM—	TO—	Size in in.	Kind.	Shape.	Length in feet.
1st av. S.	13th st.	Grant st.	15	Cement.	Oval	280.7
1st av. S.	15th st.	17th st.	24	Brick.	Egg	702.1
1st st. N.	Nicollet av.	2nd av.	18	Cement.	Oval	889.8
1st st. N.	2nd av.	3rd av.	15	"	"	410.9
1st st. S.	Nicollet av.	1st av.	24	"	"	400.4
4th av. S.	Wash'gton av.	4th st.	24	Brick.	Egg	818.
4th av. S.	4th st.	6th st.	18	Cement.	Oval	822.
4th av. S.	6th st.	9th st.	24	Brick.	Egg	1,123.3
4th av. S.	11th st.	15th st.	24	"	"	910.7
4th av. S.	15th st.	18th st.	36	Brick.	"	1,028.9
4th av. S.	18th st.	22nd st.	30	"	"	1,572.6
4th av. S.	22nd st.	24th st.	24	"	"	630.1
4th av. S.	24th st.	25th st.	24	"	"	678.4
4th av. S. E.	5th st.	6th st.	48	"	"	393.8
4th st. N.	1st av.	2nd av.	15	Cement.	Oval	406.5
4th st. N.	2nd av.	3rd av.	12	"	"	360.2
4th st. N.	Bassett's cr'k	14th av.	24	Brick.	Egg	2,363.6
4th st. N.	14th av.	15th av.	24	"	"	402.3
4th st. N.	15th av.	16th av.	24	"	"	397.8
4th st. S.	Nicollet av.	1st av.	24	"	"	415.3
4th st. S.	1st av. S.	3rd av.	12	Cement.	Oval	710.5
4th st. S.	Nicollet av.	Hennepin av.	12	"	"	345.6
4th st. S.	3rd av.	8th av.	12	"	"	1,746.5
4th st. S.	11th av.	13th av.	12	"	"	817.7
4th st. S.	15th av.	Cedar av.	60	Brick.	Egg	630.2
4th st. S.	Cedar av.	19th av.	60	"	"	431.8
4th st. S.	19th av.	21st av.	72	"	"	802.
4th st. S. E.	Central av.	2nd av.	12	Cement.	Oval	710.8
4th st. S. E.	2nd av.	4th av.	12	"	"	823.
4th st. S. E.	4th av.	6th av.	15	"	"	891.6
4th st. S. E.	6th av.	8th av.	18	"	"	819.8
4th st. S. E.	8th av.	10th av.	24	"	"	814.4
4th st. S. E.	10th av.	12th av.	18	"	"	819.8
4th st. S. E.	12th av.	14th av.	15	"	"	821.7
5th av. S.	Wash. av.	3rd st.	12	"	"	370.
5th av. S.	3rd st.	4th st.	18	"	"	403.5
5th av. S.	4th st.	6th st.	15	"	"	823.4
5th av. S.	6th st.	7th st.	12	"	"	207.5
5th av. S.	7th st.	9th st.	12	"	"	816.4
5th av. S.	9th st.	10th st.	18	"	"	399.5
5th av. S.	10th st.	Grant st.	15	"	"	572.3
5th av. S.	Grant st.	15th st.	12	"	"	575.1
5th av. S.	15th st.	17th st.	30	Brick.	Egg	646.3
5th av. S.	17th st.	18th st.	24	"	"	386.7
5th av. S.	18th st.	24th st.	24	"	"	2,294.8
5th av. S.	27th st.	28th st.	30	"	"	647.4
5th st. N.	Hennepin av.	1st av.	12	Cement.	Oval	351.5
5th st. N.	bet. 4th & 5th	avs. to 6th av.	8.5x6	Brick and stone.	"	694.7
5th st. N.	6th av.	Bassett's cr'k	90	Brick.	Various	913.5
5th st. N.	Bassett's cr'k	10th av.	48	" "	Egg	109.4
			30			30.4
			60			611.
5th st. S.	Hennepin av.	Nicollet av.	12	Cement.	Oval	487.3
5th st. S.	Nicollet av.	1st av.	12	"	"	352.5
5th st. S.	1st av.	2nd av.	12	"	"	352.5
5th st. S.	2nd av.	3rd av.	12	"	"	351.7
5th st. S.	3rd av.	4th av.	12	"	"	352.3
5th st. S.	4th av.	5th av.	12	"	"	351.5
5th st. S.	5th av.	6th av.	12	"	"	351.7
5th st. S.	11th av.	13th av.	12	"	"	814.5
5th st. S.	13th av.	14th av.	30	Brick.	Egg	373.4
5th st. S.	14th av.	15th av.	36	"	"	402.9
5th st. S. E.	1st av.	4th av.	30	"	"	1,207.8
5th st. S. E.	4th av.	6th av.	54	"	"	876.1
5th st. S. E.	6th av.	10th av.	60	"	"	1,648.6
5th st. S. E.	10th av.	13th av.	42	"	"	1,240.9
5th st. S. E.	13th av.	15th av.	36	"	"	795.1
14th av. N.	4th st.	5th st.	18	Cement.	"	329.
14th av. S.	7th st.	9th st.	30	Brick.	"	812.1
14th av. S.	9th st.	18th st.	24	"	"	712.9
14th av. S.	Franklin av.	24th st.	54	"	"	1,548.9
14th av. S.	24th st.	26th st.	54	"	"	1,327.5
14th st.	Portland av.	Park av.	24	"	"	1,302.4
15th av. S.	4th st.	6th st.	60	"	"	869.8
15th av. S.	6th st.	Franklin av.	60	"	"	2,510.9
15th av. S. E.	5th st.	8th st.	30	"	"	1,229.8

Table No. 9.—Continued.

SEWERS CONSTRUCTED PREVIOUS TO JANUARY 1ST, 1890.

STREET.	FROM—	TO—	Size in inches.	Kind.	Shape.	Length in feet.
15th av. S. E.	8th st.	Rollins av.	24	"	"	606.3
15th av. S. E.	Rollins av.	Como av.	24	"	"	904.7
15th st.	Nicollet av.	Vine place.	24	"	"	397.2
15th st.	Nicollet av.	Stevens av.	30	"	"	664.3
15th st.	Stevens av.	3rd av. S.	36	"	"	623.
15th st.	3rd av.	4th av. S.	42	"	"	652.8
15th st.	4th av. S.	Park av.	48	"	"	1,324.2
15th st.	Park av.	11th av. S.	54	"	"	1,740.5
Grant st.	Nicollet av.	1st av. S.	15	Cement.	Oval	353.
Harmon place	10th st.	11th st.	10	Cement.	Oval	*339.9
Harrison st.	Division st.	Summer st.	36	Brick	Egg	1,980.9
Harrison st.	Summer st.	20th av. N. E.	36	Brick	Egg	4,383.9
Hawth'rn av.	9th st.	12th st.	24	"	"	1,079.
Hawth'rn av.	12th st.	13th st.	18	Cement.	Oval	389.2
Hawth'rn av.	13th st.	15th st.	15	"	"	469.2
Hawth'rn av.	15th st.	Lyndale av.	12	"	"	982.7
Hennepin av.	1st st.	Wash. av.	24	Brick	Circular	835.5
Hennepin av.	Wash. av.	4th st.	24	"	"	875.2
Hennepin av.	4th st.	6th st.	15	Cement.	Oval	834.9
Hennepin av.	6th st.	7th st.	12	"	"	415.8
Hennepin av.	7th st.	9th st.	12	"	"	804.
Hennepin av.	9th st.	11th st.	18	"	"	662.3
Hennepin av.	11th st.	13th st.	15	"	"	775.7
Hennepin av.	13th st.	Spruce place.	12	"	"	435.6
Highland av.	Royalston av.	Royalston av.	24	Brick	Egg	1,285.9
Highland av.	Mid. lot 15, B. 2.	Oak Lake.	24	"	"	526.6
Humboldt av.	Dr'n 6th av. N.	Royalston av. N	12	Cement	Oval	177.6
Johnson st.	Division st.	Broadway st.	24	Brick	Egg	2,649.9
Knox av.	10th av. N. to S.	line, l. 10, b. 3	24	"	"	1,141.4
Linden av.	Hawth'rn av.	Oak Park...	24	"	"	1,141.4
Linden av.	13th st.	13th st.	12	Cement	Oval	468.3
Linden av.	15th st.	15th st.	12	"	"	352.7
Linden av.	15th st.	16th st.	12	"	"	360.9
Lindley av.	19th st.	Ridgewood av	12	"	"	141.
Lyndale av.	6th av. N.	8th av. N.	24	Brick	Egg	798.
Main st. N. E.	10th av.	11th av.	24	"	"	388.6
Mary place.	9th st.	10th st.	12	Cement	Oval	406.1
Min'haha av.	19th av. S.	Franklin av.	48	Brick	Egg	662.3
Min'haha av.	Franklin av.	24th st.	42	"	"	562.3
Min'haha av.	24th st.	26th st.	24	"	"	731.5
Monroe st.	3d av. N. E.	Spring st.	24	"	"	1,476.6
Nicollet av.	1st st.	High st.	12	Cement	Oval	668.2
Nicollet av.	1st st.	6th st.	24	Brick	Egg	219.4
Nicollet av.	6th st.	7th st.	15	Cement	Oval	2,416.9
Nicollet av.	7th st.	8th st.	12	"	"	383.7
Nicollet av.	8th st.	9th st.	12	"	"	393.
Nicollet av.	9th st.	10th st.	12	"	"	366.5
Nicollet av.	9th st.	10th st.	18	"	"	405.1
Nicollet av.	10th st.	12th st.	15	"	"	836.9
Nicollet av.	12th st.	half way to 13th st.	12	"	"	215.1
Nicollet av.	13th st.	15th st.	24	Brick	Egg	1,025.1
Nicollet av.	15th st.	17th st.	24	"	"	665.3
Nicollet av.	17th st.	19th st.	18	Cement	Oval	851.5
Nicollet av.	19th st.	22d st.	24	Brick	Egg	1,049.7
Nicollet av.	22d st.	27th st.	24	"	"	2,563.5
Nicollet av.	27th st.	29th st.	30	"	"	1,311.9
Nicollet av.	29th st.	32d st.	24	"	"	1,464.9
9th av. S.	15th st.	Franklin av.	24	"	"	1,872.
9th st. N.	1st av. N.	Hawthorn av	24	"	"	275.4
9th st. S.	Hennepin av.	2d av. S.	30	"	"	1,755.5
9th st. S.	2d av.	4th av.	36	"	"	825.7
9th st. S.	4th av.	6th av.	42	"	"	810.4
9th st. S.	6th av.	10th av.	48	"	"	1,732.2
9th st. S.	10th av.	8th st. & 11 av.	51	"	"	400.3
19th av. S.	4th st.	7th st.	60	"	"	1,230.
19th av. S.	7th st.	9th st.	60	"	"	961.
19th st.	Nicollet av.	Vine place.	12	Cement	Oval	587.7
19th st.	Vine Place	100ft. w Lin'ley	24	Brick	Egg	500.
Oak st.	River Road.	4th st. S. E.	96	"	Circular	2,339.7
Oak Grove st.	Vine Place	250ft. w Spruce	24	"	Egg	654.2
Oak Grove st.	250ft. w Spruce	800ft. w Spruce	12	Cement	Oval	472.7
Oak Lake av.	6th av. N.	8th av. N.	30	Brick	Egg	756.
Park av.	10th st.	19th st.	24	"	"	2,072.8

*Private.

Table No. 9.—Continued.

SEWERS CONSTRUCTED PREVIOUS TO JANUARY 1st, 1890.

STREET.	FROM—	TO—	Size in inches.	Kind.	Shape.	Length in feet.
Park av.....	19th st.....	22d st.....	18	Cement.....	Oval.....	1,110.3
Park av.....	22d st.....	25th st.....	15	Brick.....	".....	1,269.8
Plymouth av.	2d st.....	Lyndale av..	24	Brick.....	Egg.....	2,037.4
Portland av..	Grant st.....	26th st.....	24	".....	".....	5,072.
Portland av..	26th st.....	27th st.....	84	".....	".....	628.6
Prince st.....	Central av..	Bank st.....	12	Cement.....	Oval.....	436.
Ridgewood av	Lindley av..	Pleasant av..	12	".....	".....	581.3
Riverside av.	4th st. S.....	19th av. S.....	24	Brick.....	Egg.....	68.
Riverside av.	19th av. S.....	20th av. S.....	30	Cement.....	Oval.....	160.2
Riverside av.	20th av. S.....	22d av. S.....	24	Brick.....	Egg.....	476.3
Riverside av.	22d av. S.....	23d av. S.....	15	".....	".....	953.6
Riverside av.	23d av. S.....	25th av. S.....	18	Cement.....	Oval.....	375.7
Riverside av.	25th av. S.....	27th av. S.....	12	".....	".....	45.
Royalston av.	6th av. N.....	Holden st.....	24	Brick.....	Egg.....	955.9
Stevens av..	Grant st.....	17th st.....	24	".....	".....	1,000.5
Stevens av..	24th st.....	27th st.....	24	".....	".....	1,854.6
2nd av. N.....	1st st.....	2nd st.....	12	".....	".....	1,280.6
2nd av. N.....	2nd st.....	Wash. av.....	12	".....	".....	1,939.6
2nd av. N.....	Wash. av.....	3rd st.....	15	Cement.....	Oval.....	413.2
2nd av. S.....	Wash. av.....	4th st.....	24	".....	".....	380.
2nd av. S.....	4th st.....	6th st.....	18	Brick.....	Circular.....	360.
2nd av. S.....	6th st.....	8th st.....	15	Cement.....	Oval.....	809.4
2nd av. S.....	8th st.....	9th st.....	12	".....	".....	818.4
2nd av. S.....	9th st.....	10th st.....	18	".....	".....	775.8
2nd av. S.....	10th st.....	11th st.....	15	".....	".....	400.
2nd av. S.....	11th st.....	Grant st.....	12	".....	".....	412.
2nd av. S.....	Grant st.....	15th st.....	24	".....	".....	410.
2nd av. S.....	15th st.....	22nd st.....	24	Brick.....	Egg.....	862.9
2nd st.....	Hennepin av.	3rd av. N.....	12	".....	".....	615.6
2nd st. S.....	1st av.....	2nd av.....	24	Cement.....	Oval.....	2,613.6
2nd st. S.....	2nd av.....	3rd av.....	30	".....	".....	1,069.
2nd st. S. E..	Central av..	Bank st.....	12	Brick.....	Egg.....	402.3
6th av. N.....	5th st.....	Wash. av.....	36	Cement.....	Oval.....	405.
6th av. N.....	5th st.....	Oak Lake av.	15	Cement.....	Oval.....	365.8
6th av. N.....	Oak Lake av.	Lyndale av..	12	Brick.....	Egg.....	1,278.
6th av. N.....	Lyndale av..	Dupont av.....	12	".....	".....	584.9
6th av. N.....	Dupont av.....	Emerson av..	30	".....	".....	1,020.5
6th av. N.....	Emerson av..	Elwood av.....	24	".....	".....	164.1
6th av. S.....	Wash. av.....	3rd st.....	12	Brick.....	Egg.....	454.4
6th av. S.....	3rd st.....	4th st.....	18	".....	".....	1,161.2
6th av. S.....	4th st.....	6th st.....	15	Cement.....	Oval.....	320.2
6th av. S.....	6th st.....	7th st.....	12	".....	".....	1,007.7
6th av. S.....	7th st.....	9th st.....	12	".....	".....	365.
6th av. S.....	9th st.....	10th st.....	15	".....	".....	397.2
6th av. S.....	10th st.....	tow'rds 11th st	12	".....	".....	771.1
6th av. S.....	10th st.....	tw'ds Grant st.	15	".....	".....	380.6
6th av. S.....	Grant st.....	tow'rds 10th st	12	".....	".....	755.8
6th st. N.....	Hennepin av.	1st av.....	12	".....	".....	333.5
6th st. N.....	Hennepin av.	Nicollet av..	12	".....	".....	149.8
6th st. S.....	1st av. 15.6 ft.	tw'ds Nic. av.	12	".....	".....	216.7
5th st. S.....	1st av.....	2nd av.....	15	".....	".....	139.7
6th st. S.....	2nd av.....	3rd av.....	12	".....	".....	357.
6th st. S.....	3rd av.....	4th av.....	12	".....	".....	593.1
6th st. S.....	3rd av.....	4th av.....	15	".....	".....	155.6
6th st. S.....	4th av.....	6th av.....	12	".....	".....	456.9
6th st. S.....	6th av.....	8th av.....	12	".....	".....	349.4
6th st. S.....	8th av.....	9th av.....	15	".....	".....	134.
6th st. S.....	9th av.....	11th av.....	18	".....	".....	217.1
6th st. S.....	11th av.....	15th av.....	12	Cement.....	Oval.....	716.5
6th st. S.....	13th av.....	Central av..	30	".....	".....	817.
6th st. S. E..	3rd av. S. E..	4th av.....	48	".....	".....	408.9
6th st. S. E..	4th av. S. E..	5th av.....	24	Brick.....	Egg.....	812.3
6th st. S. E..	8th av.....	10th av.....	12	".....	".....	753.3
6th st. S. E..	13th av.....	14th av.....	24	".....	".....	796.5
6th st. S. E..	14th av.....	15th av.....	24	Brick.....	Egg.....	403.2
7th av. S.....	Wash'ton av.	3rd st.....	12	".....	".....	431.3
7th av. S.....	3rd st.....	5th st.....	15	Cement.....	Oval.....	768.2
7th st. S.....	Nicollet av.	Hennepin av.	12	".....	".....	409.6
7th st. S.....	Nicollet av.	1st av.....	12	".....	".....	398.5
7th st. S.....	1st av.....	2nd av.....	15	".....	".....	422.
7th st. S.....	2nd av.....	4th av.....	12	".....	".....	711.8
7th st. S.....	6th av.....	11th av.....	24	Brick.....	Egg.....	361.6
						407.5
						764.
						2,050.5

Table No. 9.—Continued.

SEWERS CONSTRUCTED PREVIOUS TO JANUARY 1ST, 1890.

STREET.	FROM—	TO—	Size in inches.	Kind.	Shape.	Length in feet.
7th st. S.	11th av.	13th av.	12	Cement	Oval	760.
7th st. S.	13th av.	14th av.	24	Brick	Egg	359.2
7th st. S.	14th av.	16th av.	30	"	"	813.4
7th st. N. E.	Central av.	3rd av.	24	"	"	828.7
7th st. S. E.	Central av.	2nd av.	24	"	"	359.5
16th av. S.	7th st.	9th st.	30	"	"	906.5
16th av. S.	9th st.	Franklin av.	24	"	"	905.4
16th st.	Park av.	Chicago av.	24	"	"	490.3
Todd's Pond.	Dr'n into 20th	av. N. sewer	18	Cement	Oval	.63.
3rd av. N.	1st st.	3rd st.	15	"	"	413.2
3rd av. N.	1st st.	3rd st.	12	"	"	860.3
3rd av. S.	1st st.	2nd st.	12	"	"	370.9
3rd av. S.	2nd st.	Wash'ton av.	30	Brick	Egg	408.8
3rd av. S.	Wash'ton av.	3rd st.	12	Cement	Oval	408.8
3rd av. S.	3rd s. t.	5th st.	18	"	"	772.9
3rd av. S.	5th st.	7th st.	15	"	"	766.3
3rd av. S.	7th st.	8th st.	12	"	"	373.6
3rd av. S.	9th st.	11th st.	18	"	"	806.
3rd av. S.	11th st.	12th st.	15	"	"	413.2
3rd av. S.	12th st.	Grant st.	12	"	"	181.
3rd av. S.	Grant st.	14th st.	12	"	"	312.1
3rd av. S.	14th st.	15th st.	15	"	"	303.5
3rd av. S.	15th st.	17th st.	30	Brick	Egg	629.5
3rd av. S.	17th st.	Franklin av.	24	Brick	Egg	1,255.3
3rd av. S.	Franklin av.	22nd st.	15	Cement	Oval	651.7
3rd av. S.	22nd st.	24th st.	12	Cement	Oval	622.1
3rd av. S.	27th st.	29th st.	30	Brick	Egg	1,325.8
3rd av. S.	29th st.	31st st.	24	Brick	Egg	1,250.9
3rd av. N. E.	6th st.	Monroe st.	18	Cement	Oval	483.4
3rd av. S. E.	6th st.	Division st.	40	Brick	Egg	1,201.2
3rd st. N.	Hennepin av.	1st av.	30	Brick	Egg	396.2
3rd st. S.	1st av.	2nd av.	15	Cement	Oval	441.7
3rd st. N.	2nd av.	3rd av.	12	"	"	354.2
3rd st. S.	Hennepin av.	Nicollet av.	12	"	"	215.
3rd st. S.	1st av.	3rd av. S.	24	Brick	Egg	822.9
3rd st. S.	3rd av.	4th av. S.	33	"	"	412.5
3rd st. S.	4th av.	5th av. S.	36	"	"	420.7
3rd st. S.	5th av.	6th av. S.	39	"	"	406.6
3rd st. S.	6th av.	8th av. S.	42	"	"	821.6
3rd st. S.	8th av.	10th av. S.	24	"	"	714.1
3rd st. S.	10th av.	11th av. S.	12	Cement	Oval	354.6
3rd st. S.	11th av.	12th av. S.	24	Brick	Egg	406.
3rd st. S.	12th av.	Cedar av.	24	"	"	1,588.
10th av. N.	5th st.	Wash'g'tn av.	42	"	"	1,257.5
10th av. S. E.	Well at 2nd st.	5th st.	72	"	"	1,202.9
10th av. S. E.	5th st.	7th st.	60	"	"	835.8
10th av. S. E.	7th st.	Como av.	60	"	"	979.6
10th av. S. E.	Como av.	Talmage av.	48	"	"	597.5
10th av. S. E.	Talmage av.	Division st.	45	"	"	671.3
10th st. N.	1st av.	H'wth'rne av.	12	Cement	Oval	397.9
10th st. S.	Harm'n place	Mary place.	12	"	"	312.4
10th st. S.	Mary place.	Nicollet av.	12	"	"	326.4
10th st. S.	Nicollet av.	1st av.	12	"	"	349.4
10th st. S.	2nd av.	3rd av.	12	"	"	363.
10th st. S.	3rd av.	4th av.	12	"	"	353.1
10th st. S.	4th av.	5th av.	12	"	"	348.4
12th st. S.	Nicollet av.	Nly. line I. 11, b. 27, Snyder & Co.'s add.	12	"	"	194.3
12th st. S.	1st av.	2nd av. S.	12	"	"	355.3
12th st. S.	2nd av.	Clinton av.	12	"	"	522.8
12th st. N.	Linden av.	Chestnut av.	12	"	"	345.8
13th av. S.	5th st.	6th st.	30	Brick	Egg	424.
13th av. S.	6th st.	8th st.	24	Brick	Egg	812.5
13th av. S.	6th st.	7th st.	18	Cement	Oval	405.7
13th st. S.	Nicollet av.	1st av.	24	Brick	Egg	455.4
10th av. N.	Wash. av.	4th st.	36	"	"	801.9
20th av. N.	4th st.	Lyndale av.	30	"	"	790.9
20th av. N.	Lyndale av.	Emerson av.	36	"	"	1,583.1
20th av. N.	Emerson av.	James av.	30	"	"	1,533.2
21st av. S.	Wash. av.	4th st.	24	"	"	1,219.4
24th st.	Portland av.	6½ av. S.	24	"	"	277.8
26th st.	Portland av.	6½ av. S.	87	"	"	330.
26th st.	6½ av. S.	7½ av. S.	87	"	"	263.
26th st.	6½ av. S.	7½ av. S.	90	"	"	394.2

Table No. 9.—Continued.

SEWERS CONSTRUCTED PREVIOUS TO JANUARY 1st, 1890.

STREET.	FROM—	TO—	Size in inches.	Kind.	Shape.	Length in feet.
26th st.....	7½ av. S.....	10th av. S.....	93	Brick	Egg	978.9
26th st.....	10th av. S.....	14th av. S.....	96	"	"	1,306.5
26th st.....	34th av. S.....	Riverside av.	96	"	"	1,776.9
27th av. S.....	Riverside av.	Franklin av.	30	"	"	450.5
27th av. S.....	Franklin av.	26th st.....	36	"	"	2,615.
27th av. S.....	26th st.....	27th st.....	34	"	"	594.7
27th st.....	Nicollet av.	Garfield av.	72	"	Circular	2,308.
27th st.....	Garfield av.	Lyndale av.	66	"	"	331.8
27th st.....	Nicollet av.	Stevens av.	72	"	"	654.5
27th st.....	Stevens av.	3d av. S.....	75	"	"	664.4
27th st.....	3d av. S.....	4th av. S.....	78	"	"	655.8
27th st.....	4th av. S.....	5th av. S.....	81	"	"	331.3
27th st.....	5th av. S.....	Portland av.	84	"	"	336.7
Univ. av. N. E.	Central av.	1st av.....	12	Cement	Oval	362.5
Univ. av. S. E.	Central av.	1st av.....	15	"	"	576.3
Univ. av. S. E.	1st av.....	3d av.....	12	"	"	739.4
Univ. av. S. E.	3d av.....	4th av.....	15	"	"	410.2
Univ. av. S. E.	4th av.....	6th av.....	15	"	"	890.
Univ. av. S. E.	6th av.....	8th av.....	18	"	"	823.7
Univ. av. S. E.	8th av.....	10th av.....	24	Brick	Egg	815.3
Univ. av. S. E.	10th av.....	11th av.....	18	Cement	Oval	488.8
Univ. av. S. E.	33 ft E. of 11th av.	12th av.....	15	"	"	351.6
Univ. av. S. E.	12th av.....	P'int near Tuttle's Creek.	12	"	"	542.2
Vine place....	15 st.....	Oak Grove st.	24	Brick	Egg	511.4
Vine place....	Oak Grove st.	Clifton av.	24	"	"	332.5
Wash. av. N.	Hennepin av.	2d av.....	24	"	Circular	769.9
Wash. av. N.	2d av. N.	3d av.....	15	Cement	Oval	354.2
Wash. av. N.	3rd av.....	4th av.....	24	Brick	Egg	288.1
Wash. av. N.	3rd av.....	4th av.....	12	Cement	Oval	60.
Wash. av. N.	4th av.....	7th av.....	24	Brick	Egg	1,085.5
Wash. av. N.	7th av.....	8th av.....	12	Cement	Oval	558.8
Wash. av. N.	8th av.....	10th av.....	24	Brick	Egg	736.
Wash. av. N.	10th av.....	14th av.....	36	"	"	1,062.2
Wash. av. N.	14th av.....	17th av.....	30	"	"	1,190.
Wash. av. N.	17th av.....	20th av.....	24	"	"	1,031.4
Wash. av. N.	Hennepin av.	2nd av.....	40	"	"	1,160.5
Wash. av. S.	2nd av.....	Well 8th av.	44	Brick	Circular	2,448.1
Wash. av. S.	8th av.....	10th av.....	12	Cement	Oval	778.3
Wash. av. S.	10th av.....	11th av.....	15	"	"	344.5
Wash. av. S.	11th av.....	12th av.....	12	"	"	400.9
Wash. av. S.	12th av.....	14th av.....	12	"	"	813.5
Wash. av. S.	14th av.....	Cedar av.....	12	"	"	512.2
Wash. av. S.	Cedar av.....	21st av.....	24	"	Egg	1,171.7
Western av.	1st av. N.	9th st.....	18	Cement	Oval	397.3
Western av.	9th st. N.	11th st.....	15	"	"	715.1
Western av.	11th st. N.	12th st.....	12	"	"	359.2
Western av.	12th st. N.	R. R. bridge.	12	"	"	427.5
Western av.	Lyndale av.	Dupont av.....	24	Brick	Egg	1,305.4
Western av.	Dupont av.....	Emerson av.	36	"	"	306.1
Western av.	Emerson av.	Girard av.....	30	"	"	10.
Western av.	Girard av.....	Irving av.....	30	"	"	750.3
Western av.	Irving av.....					597.2
Total.....				59.98 Miles		316,680.6

Summary of Table No. 9.

KIND.	Size in inches.	TOTAL LENGTH.	
		Feet.	Feet.
Cement pipe.....	10	339.9	
“.....	12	53,901.4	
“.....	15	28,135.8	
“.....	18	15,979.4	
“.....	24	4,554.1	
			102,910.6
Brick.....	18	851.4	
“.....	24	98,285.6	
“.....	30	30,532.2	
“.....	33	742.9	
“.....	36	20,764.	
“.....	39	406.6	
“.....	40	2,361.7	
“.....	42	7,181.9	
“.....	44	2,448.4	
“.....	45	671.3	
“.....	48	5,122.6	
“.....	51	400.3	
“.....	54	5,938.4	
“.....	60	12,997.9	
“.....	66	331.8	
“.....	72	6,758.4	
“.....	75	664.4	
“.....	78	655.8	
“.....	81	331.3	
“.....	84	965.3	
“.....	87	593.	
“.....	90	2,551.3	
“.....	93	978.9	
“.....	96	6,023.1	
Brick and stone.....	8.5 ft.x.6	5,230.6	
			213,789.1
59.98 Miles.			316,699.7

Supplement to Table No. 9.

SEWER TUNNELS CONSTRUCTED PREVIOUS TO JANUARY 1, 1890.

STREET.	FROM—	To—	Length in feet.
8th av. S.....	River.....	Washington av.....	860.
11th av. S.....	River.....	218.4 ft. N. of 2d st.....	645.
4th st. S.....	River.....	21st av. S.....	940.
10th av. S. E.....	River.....	University av. S. E.....	418.
N. E. Minneapolis.....			7,235.3
Oak st.....			186.
N. Minneapolis.....			9,256.5
			17,540.8

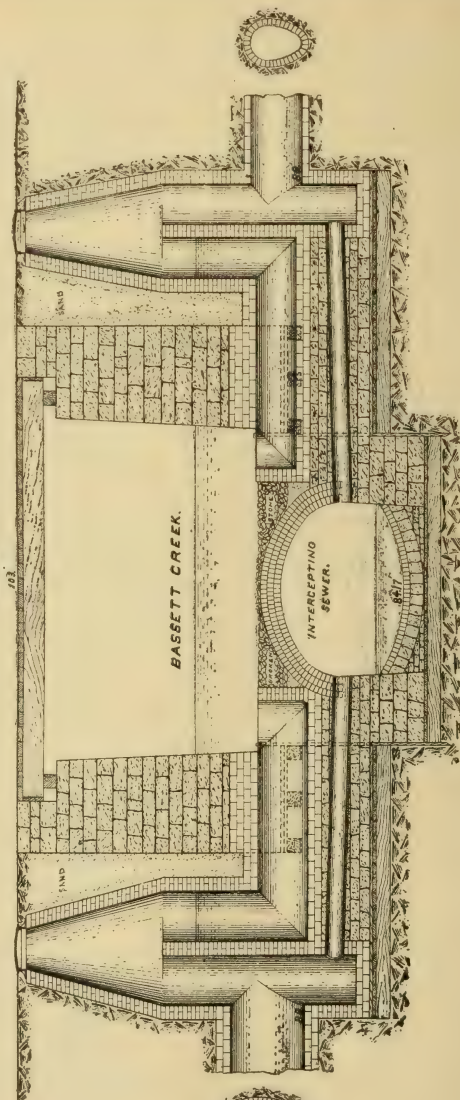
Table No. 10.

SEWERS AND SEWER TUNNELS CONSTRUCTED DURING THE SEASON OF 1889

STREET.	FROM—	To—	Size in inches.	Kind.	Shape.	Length, feet.	Cost.
Bloom'ton av.	Franklin av.	24th st.	24	Brick	Egg	1,311.	\$3,233.91
Chicago av.	26th st.	27th st.	24	"	"	647.3	2,968.65
Clinton av.	27th st.	28th st.	30	"	"	646.6	2,304.14
Como av.	15th av.	23rd av. S. E.	24	"	"	1,447.2	10,064.71
Dupont av.	St.P.M.&M. Ry	1st av. N.	72	Brick & stone.	"	646.5	5,001.13
Dupont av.	1st av. N.	8th av. N.	8.5x6	Brick & stone.	"	3,087.8	66,406.33
Elwood av.	6th av. N., S.W. side Barns	Pk. 10th av. N.	24	Brick	Egg	1,851.	7,557.38
8th av. N., 260	W. Lyndale av	Dupont av.	8.5x6	"	"	1,448.1	31,768.54
8th av. N.	Dupont av.	Emerson av.	24	"	"	13.1	2,641.48
8th av. N.	Emerson av.	Fremont av.	42	"	"	303.7	3,257.93
8th av. N.	Fremont av.	Humboldt av.	36	"	"	305.8	3,764.46
8th av. N.	Humboldt av.	Irving av.	30	"	"	661.6	2,205.04
8th av. S.	5th st.	6th st.	24	"	"	403.1	1,352.69
11th av. S.	Franklin av.	24th st.	24	Cement.	Oval	311.4	4,088.51
1st av. S.	13th st.	Grant st.	15	Brick	Egg	1,300.8	794.37
1st av. S.	15th st.	17th st.	24	Cement.	Oval	280.7	2,113.03
4th av. S.	6th st.	7th st.	24	Brick	Egg	702.1	359.1
4th av. S.	11th st.	15th st.	24	"	"	359.1	2,467.79
5th st. N.	Bt. 4th & 5th	avs. to 6th av.	8.5x6	Brick & stone.	"	694.7	22,021.86
14th st.	Portland av.	Park av.	24	Brick	Egg	591.6	1,447.15
Grant st.	Nicollet av.	1st av. S.	15	Cement.	Oval	353.	998.99
Harrison st.	Summer st.	20th av. N. E.	36	Brick	Egg	4,383.9	49,291.00
Humboldt av.	Dr'n 6th av. N.	to rds 5th av. N.	12	Cement.	Oval	177.6	260.75
Johnson av.	Spring st.	Broadway st.	24	Brick	Egg	1,274.3	8,484.81
Knox av.	10th av. N.	S. line lt. 10, bk. 3, Oak Park.	24	"	"	1,141.4	4,660.74
Lindley av.	19th st.	Ridgewood av.	12	Cement.	Oval	141.	338.40
Lyndale av.	6th av. N.	8th av. N.	24	Brick	Egg	798.	2,205.56
Main st. N. E.	10th av.	11th av.	24	"	"	388.6	1,639.28
Min'haha av.	24th st.	26th st.	24	"	"	1,476.6	7,187.65
Nicollet av.	29th st.	32nd st.	24	"	"	1,964.9	7,102.86
19th st.	Vine Place, 100	ft. W. Lindley.	24	"	"	590.	1,416.00
Oak st.	River road.	4th st. S. E.	96	"	Circular	2,939.7	44,541.84
Portland av.	24th st.	26th st.	24	"	Egg	1,302.4	4,105.75
Ridgewood av.	Lindley av.	Pleasant av.	12	Cement.	Oval	581.3	1,403.67
Riverside av.	4th st. S.	19th av. S.	24	Brick	Egg	68.	982.49
Riverside av.	22nd av. S.	23rd av. S.	15	Cement.	Oval	160.2	1,149.32
Riverside av.	23rd av. S.	25th av. S.	18	"	"	375.7	3,006.77
Riverside av.	25th av. S.	27th av. S.	24	"	"	45.	3,728.04
Stevens av.	Grant st.	15th st.	24	Brick	Egg	955.9	1,820.32
Stevens av.	24th st.	27th st.	24	"	"	1,000.5	5,526.17
6th av. N.	Bet. 4th & 5th	5th st.	36	"	"	584.7	293.82
6th av. N.	5th st.	Oak Lake av.	12	Brick	Egg	18.	4,634.25
6th av. N.	Oak Lake	Lyndale av.	12	Cement.	Oval	584.9	1,366.36
6th av. N.	Lyndale av.	Dupont av.	15	"	"	1,020.5	2,566.62
6th av. N.	Dupont av.	Emerson av.	12	"	"	164.1	1,288.96
6th av. N.	Emerson av.	Elwood av.	30	Brick	Egg	454.4	4,114.44
6th st. S. E.	8th av.	10th av.	24	Brick	Egg	1,161.2	1,548.51
7th st. S.	15th av.	16th av.	12	Cement.	Oval	768.2	1,545.70
16th av. S.	7th st.	9th st.	30	Brick	Egg	410.	3,426.92
16th av. S.	9th st.	Franklin av.	24	"	"	906.5	2,622.30
Todd's pond d	rain into 20th	av. N. sewer	18	"	"	995.4	248.50
3rd av. S.	27th st.	29th st.	30	Cement.	Oval	63.	6,032.52
3rd av. S.	29th st.	31st st.	24	Brick	Egg	1,325.8	4,522.54
20th av. N.	Wash'gton av	4th st.	36	"	"	1,250.9	3,795.97
20th av. N.	4th st.	Lyndale av.	30	"	"	803.9	2,634.52
20th av. N.	Lyndale av.	Emerson av.	36	"	"	790.9	8,552.26
20th av. N.	Emerson av.	James av.	30	"	"	1,583.1	7,238.97
24th st.	Portland av.	6 1/2 av. S.	24	"	"	1,733.2	813.04
26th st.	34th av. S.	Riverside av.	96	"	"	277.8	30,102.44
27th av. S.	Riverside av.	Franklin av.	30	"	"	1,776.9	2,464.36
27th av. S.	Franklin av.	26th st.	36	"	"	450.5	22,580.83
27th av. S.	26th st.	27th st.	24	"	"	2,615.	2,902.49
27th st.	Nicollet av.	Garfield av.	72	"	Circular	594.7	23,783.04
27th st.	Garfield av.	Lyndale av.	66	"	Circular	2,308.	3,315.19

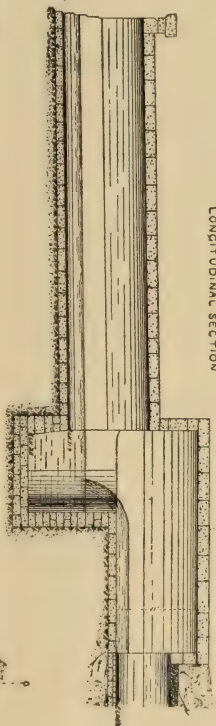
INTERSECTION OF SEWERS
— AT —
WESTERN & DUPONT AVES.

Scale 1/4" = 1'.

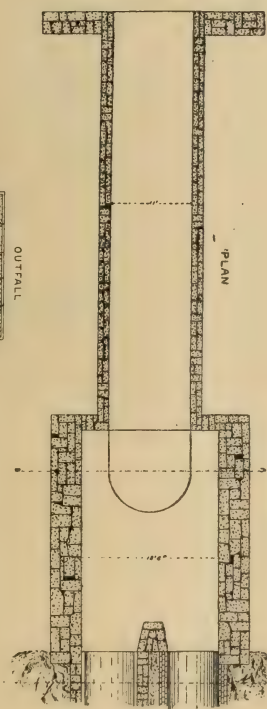


PLAN SHOWING OUTLET OF THE NORTH MINNEAPOLIS AND EIGHT AVE STUNNEL.

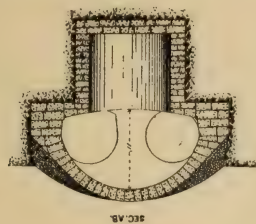
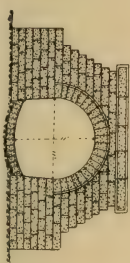
LONGITUDINAL SECTION



PLAN



OUTFALL



SEC. AB



SEC. CD

Table No. 10.—Continued.

SEWERS AND SEWER TUNNELS CONSTRUCTED DURING THE SEASON OF 1889.

STREET.	FROM—	TO—	Size in inches.	Kind.	Shape.	Length, feet.	Cost.
Wash. av. N.	3rd av.....	4th av.....	24	Cement.	Egg.....	60.	\$1,434.29
			12	"	Oval.....	288.1	
Wash. av. N.	6th av.....	7th av.....	24	Brick.	Egg.....	401.5	1,241.06
Wash. av. N.	7th av.....	8th av.....	12	Cement.	Oval.....	558.8	1,104.58
Wash. av. N.	8th av.....	10th av.....	24	Brick.	Egg.....	736.	2,779.71
Wash. av. N.	14th av.....	17th av.....	30	"	"	1,190.	4,271.02
Wash. av. N.	17th av.....	20th av.....	24	"	"	1,031.4	2,979.46
Western av...	Lyndale av..	Dupont av....	24	"	"	1,305.4	7,951.26
Western av...	Dupont av..	Emerson av...	36	"	"	306.1	1,588.26
			30	"	"	10.	
Western av...	Emerson av..	Girard av.....	30	"	"	750.3	2,722.22
Western av...	Girard av....	Irving av.....	24	"	"	597.2	3,083.40
Total....						71,739.6	\$496,800.52

NAME.	Length in feet.
N. E. Minneapolis sewer tunnel.....	1,444.3
N. Minneapolis sewer tunnel.....	381.5
S. W. Minneapolis sewer tunnel.....	435.5
	2,261.3

Summary of Table No. 10.

SIZE.	Length in feet.
12	5,967.4
15	2,048.7
18	1,018.9
24	29,776.
30	9,195.6
36	10,105.8
42	393.7
66	331.8
72	2,954.5
96	4,716.6
8.5x6	5,230.6
Total feet.....	71,739.6
Total miles.....	13.587

Table No. 11,

SEWERS TO BE CONSTRUCTED IN 1890.

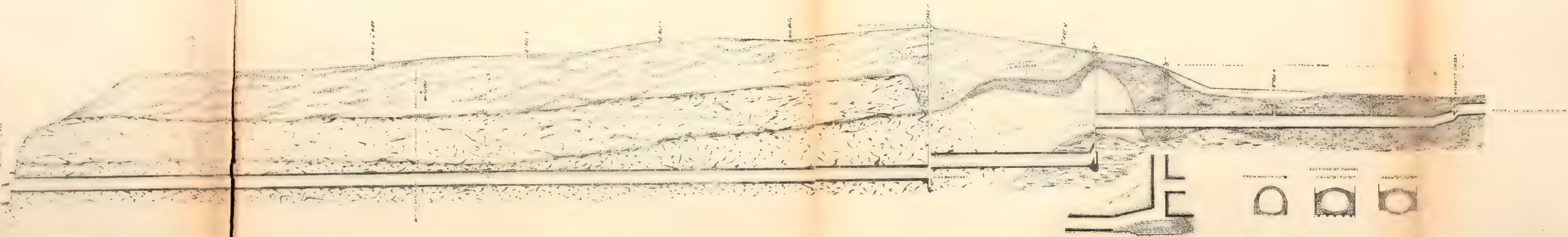
For several years the sewers have been built by day work under the direction of the city engineer. The abutting property is assessed in advance \$1.50 per front foot, regardless of the size of the sewer. This tax is paid in five annual installments.

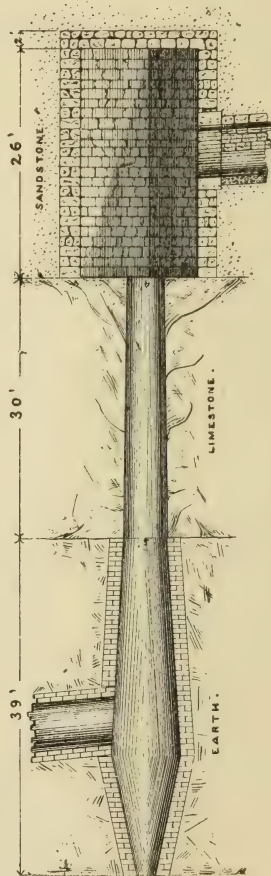
STREET.	FROM—	TO—	Size—In.	Kind.	Shape.	Estimated length—Feet.	ESTIMATED COST.	
							Total.	Property proport'n.
Adams st.	4th av. N. E.	Spring st.	24	Brick	Egg ...	755.	\$3,663.09	\$1,720.50
Bloom'gt'n av	24th st.	32nd st.	24	"	"	5,238.	15,985.03	13,805.88
Broadway.	University ...	5th st. N. E. ...	36	"	"	903.	9,500.28	2,454.48
Chicago av.	16th st.	Franklin av. ...	24	"	"	1,666.	5,882.06	4,227.86
Chicago av.	27th st.	Lake st.	30	"	"	1,944.	8,956.22	4,976.83
Clifton place.	Oak Grove st.	Groveland av	15	Cem nt	Oval ..	520.	1,307.90	1,053.68
Clifton av.	Clifton place.	E. 1 lt 16, blk 3, Hillside	12	"	"	1,100.	2,763.46	3,316.85
Dupont av.	St. P. M. & M. r y	Erie av.	84	Brick	Circ'l r	1,877.5	31,769.76	2,475.00
Dupont av.	Plymouth av. ...	20th av. N.	24	"	Egg ...	2,574.	8,483.89	6,397.65
Dupont av.	20th av. N.	22nd av. N.	30	"	"	809.	6,872.73	5,094.00
Dupont av.	22nd av. N.	25th av. N.	24	"	"	1,209.	12,988.77	3,165.00
Erie av.	Dupont av.	Lyndale av.	30	"	Circ'l r	1,308.	1,064.52	616.01
8th st. S.	Nicollet av.	1st av.	12	Cem nt	Oval ..	352.	1,107.00	990.00
8th av. S.	4th st.	5th st.	12	"	"	410.	2,844.72	2,970.00
8th av. S.	6th st.	9th st.	12	"	"	1,053.6	3,850.40	2,390.25
Franklin av. ...	8th av. S.	11th av. S.	24	Brick	Egg ...	1,130.	1,455.66	900.00
1st av. S.	Grant st.	15th st.	24	"	"	571.	1,906.	7,934.61
1st av. S.	22nd st.	26th st.	24	"	"	1,906.	10,008.32	4,698.50
1st av. S.	26th st.	27th st.	30	"	"	646.	1,697.74	2,277.00
4th st. N. E. ...	3rd av.	7th av.	24	"	"	1,688.	3,989.54	2,472.15
4th st. S. E. ...	66ft. w. of 16 av	18th av.	12	Cem nt	Oval ..	916.	3,977.80	1,470.51
4th st. S. E. ...	18th av.	Oak st.	15	"	"	940.	2,170.28	2,043.63
5th st. N. E. ...	3rd av.	100ft. n. of 4th a	30	Brick	Egg ...	651.	2,481.67	1,724.10
14th av. S.	18th st.	Franklin av. ...	15	Cem nt	Oval ..	791.	2,900.11	2,586.00
15th av. S. E. ...	Como av.	Talmadge av. ...	24	Brick	Egg ...	652.	1,123.66	915.00
Grant st.	Willow st.	Nicollet av.	24	"	Oval ..	1,047.	23,340.00	13,036.24
Groveland av	Lyndale av.	Clifton place. ...	24	"	"	376.		
Harrison st. ...	20th av. N. E. ...	30th av. N. E. ...	30	Brick	Egg ...	4,852.		
Harmon place	Hennepin av. ...	15th st.	36	"	"	918.		
Harmon place	15th st.	14th st.	18	Cem nt	Oval ..	360.	9,835.31	4,479.95
Harmon place	14th st.	12th st.	15	Cem nt	"	780.		
Harmon place	12th st.	11th st.	12	"	"	390.		
Hennepin av.	Spruce place. ...	Erie st.	24	"	Egg ...	1,145.		
Hennepin av.	Erie st.	Harmon place	30	Brick	"	347.		
Hennepin av.	Harmon place	Superior av. ...	36	"	"	412.	11,236.81	7,324.53
Hennepin av.	Superior av. ...	Oak Grove st. ...	30	"	"	367.		
Hennepin av.	Oak Grove st.	Mt. Curve av. ...	30	"	"	1,074.		
Irving av.	8th av. N.	10th av. N.	24	"	"	410.	1,306.17	888.70
Lyndale av.	27th st.	Lake st.	24	"	"	2,019.	10,633.37	6,552.34
Lyndale av.	Lake st.	31st st.	15	Cem nt	Oval ..	642.		
Lyndale av.	27th st.	26th st.	24	Brick	Egg ...	646.		
Lyndale av.	26th st.	22nd st.	51	"	"	1,960.		
Lyndale av.	22nd st.	Franklin av. ...	36	"	"	663.	21,696.50	10,609.77
Lyndale av.	Franklin av. ...	Lincoln av. ...	36	"	"	630.		
Lyndale av.	Lincoln av. ...	Dell place.	24	"	"	140.		
Lyndale av.	Erie av.	Superior av. ...	54	"	"	798.		
Lyndale av.	Superior av. ...	Groveland av. ...	24	"	"	1,000.	9,175.19	3,971.98
Main st. N. E. ...	Broadway st.	14th av.	24	"	"	1,207.	6,272.92	2,595.15
Gak Grove st.	Hennepin av.	Clifton place. ...	24	"	"	809.	2,732.70	1,491.90
Oak Grove st.	Clifton place.	E. 1. of 1st 1. J. S.	15	Cem nt	Oval ..	540.	1,284.11	1,510.41
Plymouth av.	Lyndale av.	Dupont av.	24	Brick	Egg ...	1,188.	3,953.59	2,969.52
Stevens av.	27th st.	29th st.	30	"	"	1,330.	13,532.00	8,076.87
Stevens av.	29th st.	32nd st.	24	"	"	1,865.		
Superior av.	Lyndale av.	Hennepin av. ...	48	"	"	200.	1,470.83	282.84
6th st. S.	Cedar av.	17th av.	12	Cem nt	Oval ..	248.	721.83	571.18
7th av. N.	Wash. av.	4th st.	12	"	"	773.	1,836.91	1,783.20
7th st. S. E. ...	7th av.	8th av.	18	"	"	402.	1,517.91	894.81
3rd av. N. E. ...	Main st.	4th st.	72	Stone.	"	1,225.	18,998.00	3,029.83
3rd av. N. E. ...	4th st.	5th st.	72	Brick	Egg ...	410.	6,000.00	742.50
20th av. N.	River.	Wash. av.	42	"	"	1,232.	7,844.44	3,013.50
23th st.	32nd av. S.	34th av. S.	96	"	Circ'l r	963.1	7,961.56	1,980.00
Univ. av. N. E. ...	3rd av.	7th av.	24	"	Egg ...	1,681.	10,036.67	4,695.75
Wash. av. N.	20th av.	22nd av.	30	"	"	864.		
Wash. av. N.	22nd av.	26th av.	24	"	"	1,614.	8,113.81	6,000.00
Willow st.	Harmon place	Grant st.	33	"	"	900.	5,137.02	1,193.65
Total.						70,114.4	\$339,416.87	\$169,822.26



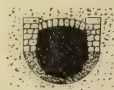
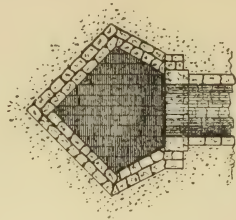
PROFILE OF THE NORTH MINNEAPOLIS SEWER TUNNEL

SCALE 1" = 20'

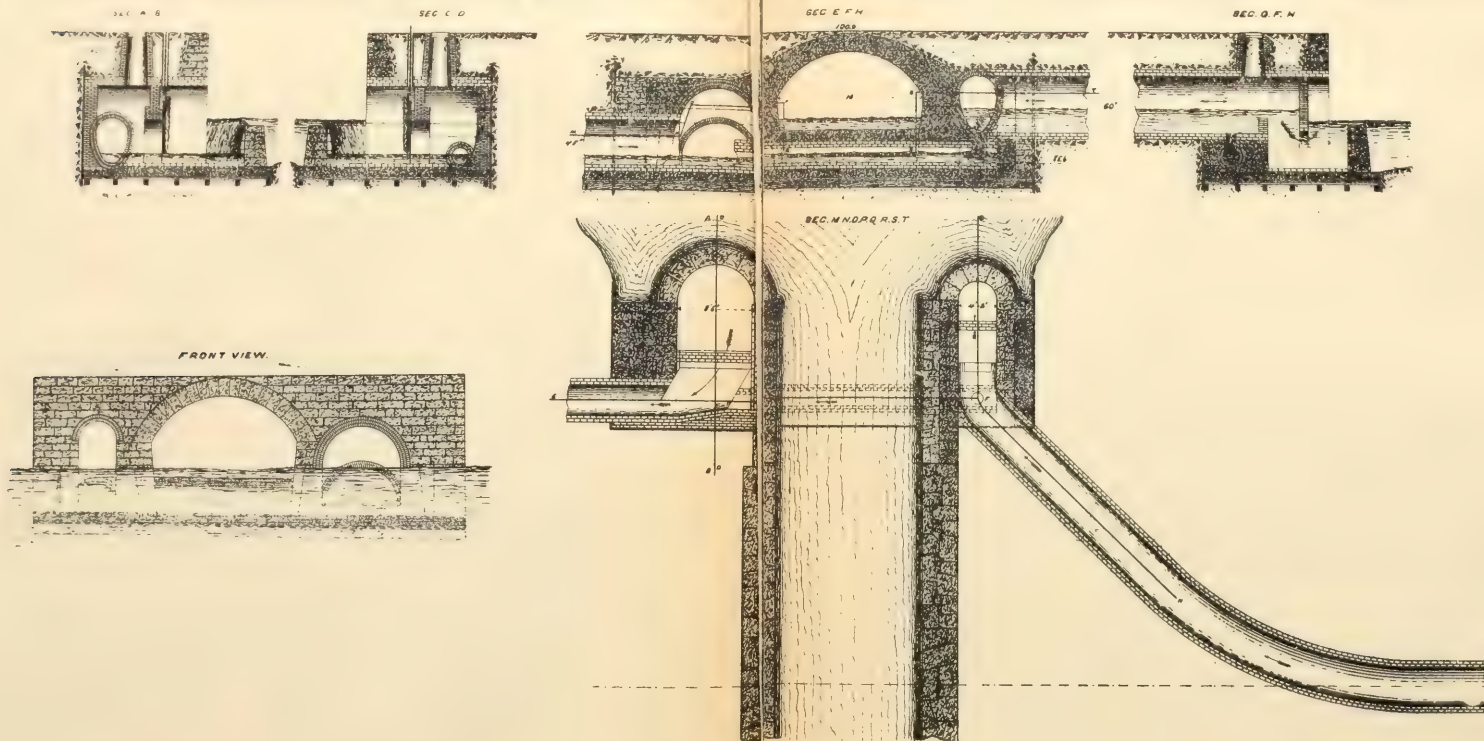




PLAN
OF
FOURTH STREET TUNNEL WELL.



PLAN
OF
SEWER CROSSING OVERFLOW & FLUSHING GATE AT BASSETT CREEK AND FIFTH ST. N.



Summary of Table No. 11.

KIND.	Size, Inches.	Length, Feet.
Cement.....	12	5,242.6
".....	15	4,589.
".....	18	762.
Brick.....	24	32,588.
".....	30	12,439.
".....	33	990.
".....	36	2,886.
".....	42	1,232.
".....	48	200.
".....	51	1,960.
".....	54	1,444.
Brick and stone.....	72	2,943.
Brick.....	84	1,877.5
Brick.....	96	961.3
Total length.....		70,114.4
Total miles.....		13.279

Table No. 12.

GRADING, STREET CLEANING, STREET REPAIRS AND STREET SPRINKLING.
COST OF LABOR, 1889.

This work was all done under the direction of the street commissioner, except the grading of University avenue, S. E., which amounted to \$7,391.36 for the excavation of 58,199 cubic yards of earth.

WARD.	Grading, cleaning and repairs.	Sprinkling.	Total.
First.....	\$3,220.18	\$3,336.00	\$6,556.18
Second.....	14,588.52	4,921.50	19,510.02
Third.....	15,660.64	5,093.30	20,153.94
Fourth.....	23,478.32	12,890.09	36,368.41
Fifth.....	11,207.88	12,938.08	24,145.96
Sixth.....	5,930.80	4,327.75	10,258.55
Seventh.....	11,544.23	1,139.00	12,683.23
Eighth.....	8,619.60	7,618.68	16,238.28
Ninth.....	6,886.64	1,674.00	8,560.64
Tenth.....	2,724.74	603.00	3,327.74
Eleventh.....	6,888.69	3,635.45	10,524.14
Twelfth.....	5,752.28	.....	5,752.28
Thirteenth.....	3,668.96	.....	3,668.96
Total.....	\$119,571.48	\$58,176.85	\$177,748.33

Table No. 13.

SIDEWALKS LAID DURING SEASON OF 1889.

The whole cost of sidewalk is assessed to the abutting property. Property owners are allowed to lay their own walks subject to the inspection of this department. Men are employed and paid by the lineal foot to lay all plank walks not laid by the owner. Stone walk laid by the city is laid by contract.

FIRST WARD.

STREET.	FROM—	TO—	SIDE.	Width—feet.	Length of brick and artificial stone walk built by property owners—feet.	Length of artificial stone walk laid by city—feet.	Length of plank walk laid by property owners—feet.	Length of plank walk laid by city—feet.	Total length—feet.
Broadway st.	2d st. N. E....	Univ. av. N.E.	North.	6	.....	.....	.....	105	105
Central av....	Main st.....	River.....	North.	12	55	.....	.....	55	55
1st av. N. E....	2d st.....	5th st.....	Both..	6	1,438	.....	.....	1,438	1,438
4th av. N. E....	Main st.....	5th st.....	Both..	6	2,086	.....	.....	2,086	2,086
5th st. N. E....	1st av.....	2d av.....	West..	6	80	.....	.....	80	80
5th st. N. E....	3d av.....	4th av.....	West..	6	212	87	.....	299	299
16th av. N. E....	Marshall st..	Grand st.	North.	6	.....	.....	.....	273	273
3d av. N. E....	2d st.....	University av	Both..	6	354	.....	.....	354	354
Univ. av. N.E....	Central av....	1st av.....	West..	6	66	.....	.....	66	66
Univ. av. N.E....	6th av.....	7th av.....	Both..	6	144	.....	.....	144	144
Univ. av. N.E....	12th av.....	Broadway st.	Both..	6	.....	.....	.....	160	160
Total.....	.....	.....	.....	.....	4,435	87	.....	538	5,060

SECOND WARD.

Arthur av ...	Division st...	Univ. av. S. E.	North.	6	.....	.....	.....	835	835
Beacon st....	Harvard st....	Oak st.....	South.	6	.....	.....	537	537	537
E. st.....	Division st....	Winter st.	East..	6	.....	.....	.....	.....	.....
4th st. S. E....	1st av.....	2d av.....	North.	6	317	.....	.....	317	317
4th st. S. E....	3d av.....	4th av.....	North.	6	296	66	.....	362	362
4th st. S. E....	8th av.....	9th av.....	North.	6	218	.....	.....	218	218
5th st. S. E....	7th av.....	8th av.....	South.	6	251	.....	.....	251	251
5th st. S. E....	11th av.....	12th av.....	South.	6	301	.....	.....	301	301
5th st. S. E....	12th av.....	13th av.....	Both..	6	.....	189	.....	*189	*189
14th av. S. E....	R. R.....	Como av....	West..	6	853	.....	.....	853	853
14th av. S. E....	6th st.....	7th st.....	West..	6	.....	260	.....	*260	*260
Rollins av....	14th av. S. E.	16th av. S. E.	South.	6	.....	.....	.....	519	519
7th av. S. E....	7th st.....	8th st.....	West..	6	.....	.....	.....	350	350
7th st. S. E....	Central av....	3d av.....	North.	6	.....	.....	80	482	562
7th st. S. E....	14th av.....	15th av.....	South.	6	.....	.....	.....	142	142
7th st. S. E....	16th av.....	19th av.....	North.	6	.....	.....	.....	317	317
16th av. S. E....	6th st.....	8th st.....	Both..	6	.....	.....	.....	229	229
16th av. S. E....	Como av....	Division st.	Both..	6	2,453	.....	.....	2,453	2,453
3d av. S. E....	4th st.....	5th st.....	East..	6	370	.....	.....	370	370
10th av. S. E....	4th st.....	5th st.....	East..	6	178	.....	.....	178	178
13th av. S. E....	7th st.....	8th st.....	West..	6	.....	299	.....	*299	*299
Univ. av. S. E....	2d av.....	3d av.....	East..	6	.....	92	.....	*92	*92
Univ. av. S. E....	27th av. S. E.	Malcolm av..	North.	6	.....	.....	975	521	1,496
Total.....	.....	.....	.....	.....	5,237	816	1,592	35,95	11,400

THIRD WARD.

Aldrich av....	Plymouth av.	14th av. N....	Both..	6	.....	.....	41	573	614
Aldrich av....	14th av. N....	15th av. N....	East..	6	.....	.....	.....	169	169
Aldrich av....	18th av. N....	20th av. N....	West..	6	.....	.....	.....	145	145
Bradford av....	7th av. N....	8th av. N....	"	6	.....	.....	.....	213	213
Bryant av....	18th av. N....	20th av. N....	Both..	6	.....	.....	.....	753	753
Cr'st'L'ke av	Girard av....	Morgan av....	South.	6	.....	.....	.....	1,213	1,213
Cr'st'L'ke av	Newton av....	23d av. N....	North.	6	.....	.....	50	600	650
Emerson av....	18th av. N....	20th av. N....	Both..	6	.....	.....	.....	471	471
8th av. N....	Wash. av....	3d st.....	East..	8	45	155	.....	200	200
8th av. N....	Bradford av..	Lyndale av..	Both..	6	.....	.....	242	242	242
8th av. N....	Girard av....	Elwood av....	"	6	.....	.....	268	45	313
11th av. N....	Lyndale av....	Bryant av....	South.	6	32	30	.....	167	229
11th av. N....	Dupont av....	Emerson av....	North.	6	.....	.....	.....	161	161
11th av. N....	Emerson av....	Fremont av....	Both..	6	.....	.....	167	488	655
18th av. N....	Aldrich av....	Bryant av....	"	6	.....	.....	.....	390	390
Fremont av....	11th av. N....	Plymouth av.	"	6	.....	.....	290	1,486	1,776

*Brick.

Table No. 13—Continued.

THIRD WARD.

STREET.	FROM—	TO—	SIDE.	Width—feet.	Length of brick and artificial stone walk built by property owners—feet.	Length of artificial stone walk laid by city—feet.	Length of plank walk laid by property owners—feet.	Length of plank walk laid by city—feet.	Total length—feet.
1st st.	4th av. N.	5th av. N.	North.	6				292	292
5th st.	6th av. N.	7th av. N.	Both.	8				414	414
5th st.	11th av. N.	11th av. N.	South.	8				100	127
14th av. N.	Bryant av.	Dupont av.	Both.	6			27	431	647
15th av. N.	Bryant av.	Dupont av.	"	6			161	498	659
Girard av.	8th av. N.	½ way to 10th av. N.	"	6					
Girard av.	20th av. N.	21st av. N.	North.	6			267	467	734
Irving av.	20th av. N.	21st av. N.	West.	6				330	330
Logan av.	8th av. N.	10th av. N.	Both.	6				99	99
Logan av.	Cr'st'l L'ke av.	Hillside av.	North.	6				1,201	1,201
Oak Lake av.	6th av. N.	Bassett's Cr'k	Both.	6			459	254	254
Plymouth av.	2d st.	Wash. av.	North.	12	52			1,169	1,628
Plymouth av.	Wash. av.	3d st.	South.	12	289				52
Plymouth av.	4th st.	5th st.	"	12	281				289
Plymouth av.	6th st.	Lyndale av.	"	12			280		281
6th av. N.	Wash. av.	3d st.	Both.	8	682				280
6th av. N.	5th st.	Lyndale av.	North.	6	67		455		682
7th av. N.	5th st.	6th st.	Both.	6				785	1,301
7th av. N.	Bradford av.	Oak Lake av.	North.	6				325	325
7th av. N.	Oak Lake av.	Bryant av.	Both.	6				154	154
3d st.	5th av. N.	6th av. N.	South.	8			100	904	904
10th av. N.	5th st.	Bassett's Cr'k	Both.	8			175	144	244
12th av. N.	Fremont av.	Girard av.	"	6				175	175
21st av. N.	2nd st.	Wash. av.	Both.	6				494	494
22nd av. N.	2nd st.	Wash. av.	"	6				670	670
23rd av. N.	2nd st.	3rd av.	"	6			853	676	676
24th av. N.	2nd st.	4th st.	"	6			604	1,368	1,368
Wash. av.	7th av. N.	8th av. N.	"	12	55			1,453	2,057
Wash. av.	12th av. N.	9th av.	"	12	54				55
Wash. av.	12th av. N.	Plymouth av.	"	12	54				54
Wash. av.	24th av. N.	26th av. N.	East.	8			649		65
Total...					1,616	155	5,549	18,034	25,354

FOURTH WARD.

Aldrich av.	Laurel av.	Hawthorne av.	West.	6				150	150
Aldrich av.	6th av. N.	Western av.	Both.	6			481		481
Bryant av.	Laurel av.	Hawthorne av.	East.	6				300	300
Bryant av.	4th av. N.	6th av. N.	Both.	6			165		165
8th st.	Hennepin av.	1st av. N.	East.	6	183				183
11th st.	Mary place.	Nicollet av.	North.	6	50				50
11th st.	1st av. N.	Holden st.	West.	6	400				400
Franklin av.	Vine place.	Pleasant av.	North.	8			100	744	844
Fremont av.	5th av. N.	6th av. N.	Both.	6			607	415	1,022
1st av. N.	11th st.	12th st.	North.	6	100				100
1st av. S.	10th st.	11th st.	West.	8	171				171
4th av. N.	Lyndale av.	Colfax av.	Both.	6			303		303
4th av. N.	Girard av.	Knox av.	Both.	6			1,032	532	1,564
4th av. N.	Newton av.	Penn av.	North.	6				444	444
5th av. N.	Girard av.	James av.	South.	6			129	605	734
5th av. N.	Knox av.	Newton av.	Both.	6			301	1,203	1,504
14th st.	Nicollet av.	Vine place.	"	6				81	249
15th st.	Hennepin av.	Howth'rn av.	"	6			113		113
15th st. N.	Spruce place.	Nicollet av.	"	6			150		150
Grant st.	Nicollet av.	1st av. S.	North.	6	61				61
Grant st.	Vine place.	Nicollet av.	Both.	6			90		90
Grant st.	Spruce place.	Willow st.	South.	6			67	147	214
Grovel'nd av.	Clifton place.	Lyndale av.	North.	6				199	199
Harmon place.	Spruce place.	Willow st.	South.	6	103				103
Hawthorn av.	10th st.	12th st.	"	6	207				207
Hawthorn av.	13th st.	15th st.	"	6	150		59		207
Hawthorn av.	16th st.	17th st.	North.	6	109				109
Hawthorn av.	17th st.	Lyndale av.	North.	6	116				116
Hawthorn av.	Aldrich.	Lyndale av.	South.	6					
Hennepin.	15th st.	Bryant.	South.	6			44		44
Hennepin.	15th st.	Harmon Pl.	Both.	6	1,352				1,352
Hennepin.	Spruce Place.	15th st.	North.	6	191				191

Table No. 13—Continued.

FOURTH WARD.

STREET.	FROM—	TO—	SIDE.	Width—feet.	Length of brick and artificial stone walk built by property owners—feet.	Length of artificial stone walk laid by city—feet.	Length of plank walk laid by property owners—feet.	Length of plank walk laid by city—feet.	Total length—feet.
Highland.....	Royalston av.	Lyndale av.	Both..	6	1,716				1,716
Hoag av.....	6th av. N....	Royalston av.	West..	6	164				164
Laurel av.....	Hennepin av.	16th st.....	Both..	6	660				660
Linden av.....	13th st.....	15th st.....	North..	6	100				100
Linden av.....	17th st.....	Lyndale av.	Both..	6					357
Linden av.....	Aldrich av....	Lyndale av.	Both..	6				509	509
Lyndale av.....	Laurel av....	Ontario av..	West..	8			50		50
Lyndale av.....	Groveland av.	Franklin av..	Both..	8			646		646
Mary Place.....	9th st.....	10th st.....	Both..	6	173		56		229
Newton av.....	5th av. N....	6th av. N....	West..	6				557	557
Nicollet av.....	3rd st.....	Grant st.....	East..	8	78				78
Nicollet av.....	Grant st.....	Oak Grove....	West..	8			118		118
19th st. W....	Lindley av....	Groveland av.	Both..	6			158		158
Oak Grove.....	Nicollet av....	Hennepin av.	Both..	6	1,106	226			1,332
Penn av.....	Western av....	6th av. N....	East..	6				1,127	1,127
Pleasant av....	Ridgewood....	Franklin av..	Both..	6			268		268
Royalston av..	R. R. bridge..	6th av. N....	Both..	6	642	100			742
2nd av. N....	3rd st.....	4th st.....	East..	8	169				169
6th av. N....	Hoag av.....	Aldrich av....	South..	6			826		826
10th st.....	Laurel av....	Hawthorn av.	Both..	6	304				304
16th st.....	Linden av....	Chestnut av..	West..	6	311				311
3rd av. N....	Lyndale av....	Aldrich av....	Both..	4				720	720
3rd av. N....	Aldrich av....	Colfax av....	Both..	6			274		274
10th st.....	Hennepin av.	Mary Place....	North..	6	608				608
10th st.....	Western av....	Holden st....	Both..	6	206	50			256
12th st.....	Western av....	1st av. N....	East..	6	308				308
13th st.....	Hawthorn av.	Yale Place....	North..	6	426				426
Western av....	1st av. N....	12th st.....	Both..	6	1,501				1,501
Western av....	Aldrich av....	Lyndale av....	Both..	6				364	364
Western av....	Penn av.....	Russell av....	North..	6				550	550
Yale Place....	12th st.....	13th st.....	West..	6	66				66
Total.....					12,088	491	6,090	8,647	27,316

FIFTH WARD.

Chicago av....	10th st.....	17th st.....	Both..	8			178	79	257
Clinton av....	Grant st.....	24th st.....	Both..	6			1,027	528	1,555
8th av. S....	3rd st.....	4th st.....	West..	8	339				339
8th av. S....	4th st.....	10th st.....	East..	8			804	358	1,162
8th st. S....	1st av.....	2nd av.....	South..	8	370				370
8th st. S....	3rd av.....	5th av.....	North..	8	346				346
8th st. S....	6th av.....	7th av.....	Both..	8	283				283
8th st. S....	7th av.....	9th av.....	Both..	8	369				369
8th st. S....	9th av.....	10th av....	North..	8	152				152
11th st. S....	3rd av.....	4th av.....	North..	8	110			167	277
18th st.....	Clinton av....	4th av.....	Both..	6			139		139
18th st.....	Portland av..	Park av.....	South..	6				206	206
18th st.....	Park av.....	Chicago av....	North..	6				308	308
Franklin av....	Clinton av....	4th av. S....	Both..	6			246		246
Franklin av....	5th av. S....	Portland av..	North..	6				251	251
Franklin av....	Portland av..	Park av.....	Both..	6			715	424	1,139
1st av. S....	9th st.....	10th st.....	East..	8	193				193
1st av. S....	13th st.....	Grant st.....	East..	8				97	97
1st av. S....	15th st.....	16th st.....	West..	6			159		159
1st av. S....	16th st.....	18th st.....	West..	6			104	333	437
4th av. S....	4th st.....	5th st.....	East..	8	293				293
4th av. S....	5th st.....	7th st.....	Both..	8	359				359
4th av. S....	7th st.....	8th st.....	Both..	8	642				642
4th av. S....	10th st.....	24th st.....	Both..	6	344		538	338	1,220
4th st. S....	8th av.....	10th av....	South..	8			80	270	350
4th st. S....	8th av.....	10th av....	North..	8	179				179
5th av. S....	5th st.....	6th st.....	West..	8	170				170
5th av. S....	6th st.....	7th st.....	East..	8	362				362
5th av. S....	8th st.....	10th st.....	East..	8	122	55			177
5th av. S....	Grant st.....	14th st.....	West..	6	53		202		255
5th av. S....	17th st.....	18th st.....	Both..	6	12		102	253	367

Table No. 13—Continued.

FIFTH WARD.

STREET.	FROM—	TO—	SIDE.	Width—feet.	Length of brick and artificial stone walk built by property owners—feet.	Length of artificial stone walk laid by city—feet.	Length of plank walk laid by property owners—feet.	Length of plank walk laid by city—feet.	Total length—feet.
5th av. S.	18th st.	19th st.	East	6	.....	.....	35	383	418
5th av. S.	Franklin av.	22nd st.	Both	6	.....	.....	168	432	600
5th st. S.	2nd av.	5th av.	Both	8	963	.....	.....	.....	963
5th st. S.	6th av.	7th av.	North	8	179	.....	.....	.....	179
5th st. S.	8th av.	10th av.	"	8	.....	.....	108	301	409
14th st.	1st av.	Stevens av.	"	6	63	.....	.....	.....	63
14th st.	Clinton av.	4th av. S.	Both	6	136	.....	.....	.....	136
14th st.	4th av. S.	Portland av.	"	6	266	.....	133	.....	399
15th st.	Nicollet av.	1st av. S.	Both	6	.....	.....	160	.....	160
15th st.	Clinton av.	5th av. S.	North	6	130	.....	140	134	404
15th st.	Portland av.	9th av. S.	Both	6	100	.....	1,347	52	1,499
Nicollet av.	Grant st.	17th st.	East	8	.....	.....	131	362	493
Nicollet av.	Franklin av.	24th st.	East	8	.....	.....	.....	1,147	1,147
9th st. S.	1st av.	3rd av.	Both	8	789	.....	.....	.....	789
9th st. S.	3rd av.	6th av.	Both	8	689	.....	.....	.....	689
9th st. S.	6th av.	8th av.	South	8	265	.....	.....	.....	265
Park av.	15th st.	16th st.	West	8	275	.....	.....	.....	275
Park av.	19th st.	Franklin av.	West	8	224	.....	.....	.....	224
Portland av.	19th st.	Franklin av.	East	8	159	.....	.....	.....	159
Stevens av.	Grant st.	14th st.	Both	6	.....	.....	.....	158	158
Stevens av.	17th st.	19th st.	East	6	.....	.....	.....	334	334
Stevens av.	Franklin av.	22nd st.	East	6	.....	.....	.....	257	257
2nd av. S.	8th st.	9th st.	Both	8	607	.....	.....	.....	607
2nd av. S.	9th st.	10th st.	East	8	177	.....	.....	.....	177
2nd av. S.	14th st.	15th st.	"	6	.....	.....	.....	32	32
2nd av. S.	15th st.	16th st.	"	6	.....	.....	.....	273	273
6th av. S.	4th st.	6th st.	"	15	172	.....	.....	.....	172
6th av. S.	6th st.	7th st.	West	8	210	.....	.....	.....	210
6th av. S.	8th st.	9th st.	West	8	177	.....	.....	.....	177
6th av. S.	9th st.	10th st.	Both	8	150	.....	.....	.....	150
6th st.	2nd av.	3rd av.	"	8	362	.....	.....	.....	362
6th st.	3rd av.	8th av.	"	8	1,527	.....	.....	.....	1,527
6th st.	8th av.	9th av.	"	8	.....	.....	132	210	342
6th st.	9th av.	10th av.	South	8	.....	.....	55	.....	55
7th av. S.	6th st.	8th st.	Both	8	705	.....	.....	.....	705
7th av. S.	8th st.	9th st.	East	8	90	.....	.....	.....	90
7th st. S.	4th av.	7th av.	North	8	266	.....	.....	.....	266
7th st. S.	7th av.	8th av.	Both	8	708	.....	.....	.....	708
7th st. S.	8th av.	9th av.	North	8	.....	.....	.....	148	148
7th st. S.	8th av.	10th av.	Both	8	210	.....	.....	.....	210
16th st.	Nicollet av.	1st av. S.	Both	6	.....	.....	142	.....	142
16th st.	Clinton av.	3rd av. S.	North	6	.....	.....	136	.....	136
16th st.	Clinton av.	4th av. S.	Both	6	270	.....	.....	.....	270
16th st.	5th av. S.	Portland av.	North	6	.....	.....	133	.....	133
16th st.	Chicago av.	Park av.	South	6	.....	.....	146	215	361
17th st.	4th av. S.	Portland av.	South	6	.....	.....	136	133	269
3rd av. S.	5th st.	6th st.	East	8	349	55	.....	.....	349
3d av. S.	6th st.	7th st.	West	8	177	.....	.....	.....	177
3d av. S.	7th st.	8th st.	"	8	189	.....	.....	.....	189
3d av. S.	9th st.	10th st.	East	8	177	.....	.....	.....	177
3d av. S.	11th st.	12th st.	"	15	48	.....	.....	.....	48
3d av. S.	Grant st.	22d st.	Both	6	637	.....	1,144	590	2,371
3d av. S.	22d st.	24th st.	East	6	.....	.....	174	.....	174
10th av. S.	24th st.	5th st.	North	8	.....	.....	121	.....	121
10th av. S.	5th st.	7th st.	West	8	.....	.....	185	.....	185
10th st. S.	3d av.	4th av.	South	8	122	.....	.....	.....	122
10th st. S.	7th av.	Chicago av.	North	8	316	.....	.....	.....	316
12th st. S.	1st av.	2d av.	Both	8	.....	.....	193	110	303
12th st. S.	2d av.	3d av.	South	8	.....	.....	.....	110	110
13th st. S.	1st av.	2d av.	"	8	.....	.....	.....	61	61
22d st.	4th av. S.	5th av. S.	"	8	.....	.....	129	.....	129
22d st.	Park av.	Chicago av.	Both	6	.....	.....	568	.....	568
24th st.	4th av. S.	Portland av.	North	6	.....	.....	.....	272	272
Total.					16,556	55	9,910	9,416	35,937

Table No. 13—Continued.
EIGHTH WARD.

STREET.	FROM—	TO—	SIDE.	Width—feet.	Length of brick and artificial stone walk laid by property owners—feet.	Length of artificial stone walk laid by city—feet.	Length of plank walk laid by property owners—feet.	Length of plank walk laid by city—feet.	Total length—feet.
Aldrich av....	24th st.....	26th st.....	Both..	6	.....	.....	778	385	1,163
Colfax av....	24th st.....	26th st.....	"	6	172	.....	462	1,064	1,698
Garfield av....	Lake st.....	31st st.....	West..	6	.....	.....	80	487	567
Harriet.....	Lake st.....	31st st.....	"	6	.....	.....	104	421	525
Hennepin av....	Lake st.....	34th st.....	Both..	6	296	.....	38	2,181	2,515
Lake st.....	Stevens av....	2nd av. S....	South..	"	.....	.....	.....	213	213
Lake st.....	6½ av. S....	Park av.....	North..	"	.....	.....	.....	258	258
Lindley av....	26th st.....	28th st.....	Both..	"	360	.....	397	1,012	1,769
Lindley av....	28th st.....	32nd st.....	"	"	.....	.....	130	2,360	2,390
Motor av.....	Lake st.....	31st st.....	"	4	.....	.....	40	.....	40
Nicolet av....	Lake st.....	33rd st.....	West..	"	.....	.....	348	968	1,316
Pleasant av....	22nd st.....	24th st.....	"	"	.....	.....	.....	538	538
Pleasant av....	25th st.....	26th st.....	"	"	.....	.....	.....	286	286
2nd av. S....	32nd st.....	33rd st.....	Both..	6	.....	.....	92	800	892
3rd av. S....	25th st.....	26th st.....	West..	"	.....	.....	.....	76	76
26th st.....	Clinton av....	4th av. S....	North..	"	.....	.....	120	.....	120
28th st.....	Lyndale av....	Hennepin av..	Both..	"	129	.....	133	1,844	2,106
32nd st.....	3rd av. S....	Pleasant av....	North..	"	127	.....	169	527	816
Total.....	.....	.....	.....	.....	1,084	.....	2,891	13,313	17,288

NINTH WARD.

Broadway st.	Van Buren st	Jackson st....	South..	6	.....	.....	132	.....	132
Central av....	6th st.....	7th st.....	North..	12	258	.....	.....	.....	258
Division st....	15th av. N. E.	Tuttle st....	"	6	.....	.....	.....	283	283
E. st.....	Division st....	Winter st....	"	6	.....	.....	.....	500	500
Fillmore st....	Spring st....	Broadway st.	Both..	6	.....	.....	.....	1,705	1,705
18½ av. N. E.	Monroe st....	Harrison st....	"	6	.....	.....	857	1,401	2,252
5th st. N. E.	Central av....	1st av.....	East..	6	.....	.....	250	.....	250
5th st. N. E.	2nd av.....	4th av.....	"	6	.....	.....	423	.....	423
15th av. N. E.	Jefferson st....	Madison st....	Both..	6	.....	.....	.....	572	572
15th av. N. E.	Wash. av....	Monroe st....	"	6	.....	.....	.....	2,178	2,178
Harrison st....	50 feet W. of	24th av. N. E.	West..	6	.....	.....	.....	32	32
Jackson st....	18½ av. N. E.	20th av. N. E.	Both..	6	.....	.....	350	983	1,333
Jefferson st....	17th av. N. E.	19th av. N. E.	West..	6	.....	.....	108	254	362
Summer st....	Quincy st....	Van Buren st	North..	6	.....	.....	138	132	270
Summer st....	Tyler st.....	Taylor st.....	"	6	.....	.....	.....	282	282
6th st. N. E.	Central av....	3rd av.....	Both..	6	.....	.....	612	470	1,082
6th st. N. E.	Broadway....	17th av.....	Both..	6	.....	.....	1,778	1,820	3,598
15th av. N. E.	Wash'ton st.	Monroe st....	Both..	6	.....	.....	.....	855	855
25th av. N. E.	Monroe st....	Johnson st....	Both..	6	.....	.....	3,771	1,180	4,951
Total.....	.....	.....	.....	.....	258	.....	8,413	12,647	21,318

ELEVENTH WARD.

8th st. S....	26th av.....	28th av.....	Both..	8	.....	.....	104	254	358
Franklin av....	10th av. S....	Mississippi ry	Both..	12	.....	.....	2,265	3,131	5,396
19th st.....	17th av. S....	Ry. rt. of way	Both..	6	.....	.....	75	.....	75
7th st. S....	25th av.....	27th av.....	South..	8	.....	.....	165	444	609
13th av. S....	7th st.....	8th st.....	West..	8	1171	.....	.....	.....	342
21st av. S....	7th st.....	8th st.....	Both..	8	698	104	.....	.....	802
22nd av. S....	Franklin av....	24th st.....	"	8	.....	.....	184	1,833	2,017
22½ av. S....	Franklin av....	24th st.....	"	4	.....	.....	164	1,141	1,305
22nd st.....	Cedar av....	Bloom'ton av.	"	6	.....	.....	1,168	519	1,687
24th av. S....	7th st.....	Riverside av.	"	8	.....	.....	.....	154	154
24th st.....	24th av. S....	29th av. S....	North..	8	.....	.....	522	882	1,404
26th av. S....	8th st.....	24th st.....	Both..	8	.....	.....	1,574	1,924	3,498
27th av. S....	8th st.....	Franklin av....	Both..	8	.....	.....	704	1,110	1,814
28th av. S....	Riverside av.	Franklin av....	Both..	8	.....	.....	69	320	389
Total.....	.....	.....	.....	.....	1,040	104	6,994	11,712	19,850

TWELFTH WARD.

50th st.....	34th av. S....	42nd av. S....	Both..	4	.....	2,475	.....	2,359	4,834
Total.....	.....	.....	.....	.....	.....	2,475	.....	2,359	4,834

*Brick, †Artificial stone.

Summary of Table No. 13.

WARD.	Length of brick and artificial stone walk built by property owners—feet.	Length of artificial stone walk laid by city—feet.	Length of plank walk laid by property owners—feet.	Length of plank laid by city—feet.	Total length—feet.
First.....	4,435	87	.....	538	5,060
Second.....	5,237	816	1,592	3,759	11,404
Third.....	1,616	155	5,549	18,034	25,354
Fourth.....	12,088	491	6,090	8,647	27,316
Fifth.....	16,556	55	9,910	9,416	35,937
Sixth.....	1,788	.....	8,014	9,321	19,123
Seventh.....	.....	.....	.....	4,477	4,477
Eighth.....	1,084	.....	2,891	13,313	17,288
Ninth.....	258	.....	8,413	12,647	21,318
Eleventh.....	1,040	104	6,994	11,712	19,850
Twelfth.....	.....	2,475	.....	2,359	4,834
Total.....	44,102	4,183	49,453	94,223	*191,961

*33.356 miles.

Table No. 14.

SIDEWALKS ORDERED FOR 1890.

N. B.—A. S. Indicates Artificial Stone. FIRST WARD.

STREET.	FROM—	TO—	KIND.	SIDE.	Width, feet.	Length assess'd.	Amount of assessm't.
1st av. N. E.	Main st.	2d st.	A. S.	Both	6	684.	\$574.56
1st av. N. E.	4th st.	5th st.	A. S.	"	6	354.	297.36
1st av. N. E.	University av.	4th st.	A. S.	South	6	358.	300.72
4th st. N. E.	1st av.	6th av.	A. S.	East.	6	725.	609.00
4th st. N. E.	Broadway st.	18th av.	Plank.	West	6	2,428.5	679.98
4th av. N. E.	Main st.	2d st.	A. S.	Both	6	129.	108.36
4½ st. N. E.	12th av.	18th av.	Plank.	West	6	2,102.2	588.62
5th st. N. E.	1st av.	Broadway st.	A. S.	"	6	2,286.5	1,020.66
14th av. N. E.	Main st.	4½ st.	Plank.	Both	6	2,735.	765.80
Main st. N. E.	Central av.	4th av.	Asph't	West	12	1,682.7	2,355.78
Main st. N. E.	5th av.	9th av.	A. S.	"	6	1,415.	1,188.60
Main st. N. E.	9th av.	13th av.	A. S.	Both	6	1,919.8	1,612.66
Marshall st.	5th av. N. E.	13th av. N. E.	A. S.	"	6	4,566.4	3,835.79
9th av. N. E.	University av.	5th st.	Plank.	"	6	1,119.5	313.46
2d av. N. E.	Main st.	5th st.	A. S.	"	6	2,148.	1,804.32
2d st. N. E.	Broadway st.	18th av.	Plank.	"	6	3,622.	1,014.16
2d st. N. E.	1st av.	5th av.	A. S.	West	6	276.	231.84
6th av. N. E.	Ramsey st.	5th st.	A. S.	Both	6	3,437.	2,887.08
16th av. N. E.	Main st.	5th st.	Plank.	"	6	2,683.7	751.42
3d av. N. E.	2d st.	University av.	A. S.	"	6	358.	300.72
12th av. N. E.	4th st.	4½ st.	Plank.	"	6	674.	188.72
13th av. N. E.	4th st.	5th st.	Plank.	"	6	1,233.6	345.52
Univ. av. N. E.	5th av.	Broadway st.	A. S.	"	6	2,943.	2,472.12
Univ. av. N. E.	17th av.	18th av.	Plank.	"	6	698.	195.44
Total.						40,578.9	\$25,342.69

SECOND WARD.

Como av.	12th av. S. E.	13th av. S. E.	A. S.	North.	6	277.	232.68
Como av.	Tuttle st.	16th av. S. E.	A. S.	"	6	277.	232.68
Como av.	10th av. S. E.	12th av. S. E.	A. S.	"	6	566.	475.44
Como av.	13th av. S. E.	14th av. S. E.	A. S.	"	6	283.	237.72
Division st.	6th av. S. E.	10th av. S. E.	A. S.	South.	6	1,141.1	958.54
Division st.	Tuttlest.	Oak st.	A. S.	"	6	547.2	459.68
8th st. S. E.	2d av.	3d av.	Plank.	North.	6	284.	79.52
8th st. S. E.	10th av.	13th av.	Plank.	Both	6	1,843.7	516.19
8th st. S. E.	13th av.	14th av.	Plank.	North.	6	358.3	100.30
8th st. S. E.	15th av.	16th av.	Plank.	"	6	358.	100.24
11th av. S. E.	7th st.	9th st.	Plank.	Both	6	1,410.5	394.92
11th av. S. E.	Como av.	Division st.	A. S.	West	6	1,223.4	1,027.66
11th av. S. E.	Como av.	Talmage av.	A. S.	East	6	605.7	508.79
4th st. S. E.	5th av.	7th av.	A. S.	South	6	364.	305.76
4th st. S. E.	6th av.	7th av.	A. S.	North	6	86.	72.24
4th st. S. E.	13th av.	14th av.	A. S.	North	6	212.	178.08
5th st. S. E.	3rd av.	4th av.	A. S.	East	6	218.	183.12
5th st. S. E.	10th av.	11th av.	A. S.	East	6	56.	47.04
5th st. S. E.	4th st.	5th st.	A. S.	West	6	364.	305.76
5th st. S. E.	13th av.	14th av.	A. S.	North	6	212.	176.08
14th av. S. E.	Como av.	Talmage av.	A. S.	East	6	405.4	340.54
14th av. S. E.	7th st.	St. P. M. & M. Ry.	A. S.	Both	6	1,085.2	911.60
14th av. S. E.	Como av.	Talmage av.	A. S.	West	6	483.5	406.14
15th av. S. E.	Como av.	Division st.	A. S.	Both	6	1,979.6	1,662.87
15th av. S. E.	8th st.	Rollins av.	A. S.	Both	6	266.	223.44
Lenox st.	Railroad	Mississippi st.	Plank.	West	6	1,125.5	315.14
Mississippi st.	Lenox st.	Frank. av. bdg.	Plank.	West	6	402.5	112.70
Oak st.	Como av.	Division st.	Plank.	West	6	970.5	271.74
Prince st.	Central av.	Bank st.	A. S.	East	6	395.	331.80
St. Marys av.	University av.	Lenox st.	Plank.	West	6	1,387.5	388.49
7th st. S. E.	Central av.	3rd av.	Plank.	North	6	212.	59.36
7th st. S. E.	15th av.	16th av.	Plank.	North	6	313.	87.64
7th st. S. E.	16th av.	19th av.	Plank.	North	6	619.	173.32
6th av. S. E.	8th st.	Railroad.	Plank.	East.	6	859.7	240.72
6th st. S. E.	11th av.	12th av.	A. S.	South	6	59.8	59.24
16th av. S. E.	6th st.	8th av.	Plank.	Both	6	852.	228.56
Talmage av.	11th av. S. E.	12th av. S. E.	A. S.	South	6	276.8	232.52
Talmage av.	Tuttlest.	Oak st.	A. S.	Both	6	1,083.2	909.92
Talmage av.	12th av. S. E.	13th av. S. E.	A. S.	South	6	276.8	232.52
Talmage av.	14th av. S. E.	15th av. S. E.	A. S.	Both	6	553.6	465.04
Talmage av.	15th av. S. E.	Tuttlest.	A. S.	South	6	282.8	237.56
Tuttle st.	Como av.	Division st.	A. S.	Both	6	2,386.2	2,004.41
3rd av. S. E.	6th st.	7th st.	A. S.	East	6	359.	301.56
10th av. S. E.	7th st.	Como av.	A. S.	East	6	612.7	514.67
12th av. S. E.	Como av.	Division st.	A. S.	East	6	1,217.	1,022.28

Table No. 14—Continued.

SECOND WARD.

STREET.	FROM—	TO—	KIND.	SIDE.	Width, feet.	Length assess'd.	Amount of assess'm't
13th av. S. E....	University av.	4th st.....	Plank.	East	6	356.	99.68
13th av. S. E....	Talmage av.	Division st.....	A. S....	East	6	614.2	515.93
13th av. S. E....	Como av.	Talmage av.....	A. S....	East	6	568.2	477.29
21st av. S. E....	Como av.	Talmage av.....	Plank.	Both	6	1,009.9	282.77
22nd av. S. E....	Como av.	Talmage av.....	Plank.	West	6	606.9	169.93
27th av. S. E....	University av.	Essex st.....	Plank.	East	6	679.5	190.26
Total.....						32,985.9	\$20,065.08

THIRD WARD.

Bryant av.....	18th av. N.	20th av. N.....	Plank.	Both	6	1,018.5	\$285.18
Bryant av.....	20th av. N.....	21st av. N.....	Plank.	Both	6	692.	193.76
Crystal Lake av	Newton av.....	Penn av.....	Plank.	Both	6	2,173.8	608.66
Emerson av.....	6th av. N.....	11th av. N.....	Plank.	West	6	1,610.1	450.80
Emerson av.....	22d av. N.....	26th av. N.....	Plank.	Both	6	2,600.	728.00
8th av. N.....	Oak Lake av.....	Bradford av.....	Plank.	North....	6	52.5	14.70
8th av. N.....	2d st.....	3d st.....	A. S....	East....	8	448.	501.76
8th av. N.....	Oak Lake av.....	Lyndale av.....	Plank.	Both	6	736.	206.08
8th av. N.....	Lyndale av.....	Emerson av.....	Plank.	Both	6	2,605.5	729.54
11th av. N.....	Aldrich av.....	Emerson av.....	Plank.	North....	6	414.5	116.06
11th av. N.....	5th st.....	Lyndale av.....	Plank.	South....	6	452.5	126.70
11th av. N.....	Lyndale av.....	Aldrich av.....	Plank.	South....	6	50.	14.00
18th av. N.....	Bryant av.....	Emerson av.....	Plank.	Both	6	1,142.	319.75
1st st. N.....	3d av.....	Plymouth av.....	Plank.	East....	8	1,753.8	584.78
4th st. N.....	2d av.....	Angle av.....	Plank.	Both	8	5,304.	1,768.22
4th st. N.....	Angle av.....	12th av.....	Plank.	Both	6	706.	197.69
4th st. N.....	12th av.....	Plymouth av.....	A. S....	Both	6	679.	570.36
5th av. N.....	2d st.....	3d st.....	A. S....	Both	8	1,032.	1,155.84
5th av. N.....	3d st.....	5th st.....	Plank.	Both	8	890.2	296.78
5th st. N.....	Railroad.....	9th av.....	Plank.	Both	8	2,374.1	791.50
5th st. N.....	9th av.....	10th av.....	Plank.	West	8	214.	71.35
5th st. N.....	11th av.....	6th st.....	Plank.	East....	8	251.	83.68
5th st. N.....	14th av.....	15th av.....	Plank.	East....	6	348.2	97.52
5th st. N.....	12th av.....	Plymouth av.....	A. S....	East....	6	347.	201.48
5th st. N.....	11th av.....	11th av.....	Plank.	South....	8	58.5	19.51
14th av. N.....	2d st.....	5th st.....	Plank.	North....	6	1,292.3	361.84
14th av. N.....	6th st.....	Lyndale av.....	Plank.	South....	6	270.5	75.74
Girard av.....	8th av. N.....	Plymouth av.....	Plank.	Both	6	2,853.6	793.30
Girard av.....	20th av. N.....	21st av. N.....	Plank.	East....	6	335.	93.80
Hillside av.....	21st av. N.....	25th av. N.....	Plank.	Both	6	4,269.5	1,195.51
Illion av.....	James av.....	Hillside av.....	Plank.	Both	6	1,064.9	298.22
Irving av.....	Crystal Lake av	21st av. N.....	Plank.	East....	6	223.9	62.70
James av.....	Crystal Lake av	25th av. N.....	Plank.	Both	6	5,225.4	1,463.15
Logan av.....	6th av. N.....	8th av. N.....	Plank.	East....	6	553.1	154.87
9th av. N.....	2d st.....	Wash. av.....	A. S....	North....	8	342.	383.04
Oak Lake av.....	Bassett's Creek	8th av. N.....	Plank.	East....	6	152.5	42.70
Oak Lake av.....	6th av. N.....	7th av. N.....	Plank.	East....	6	286.	80.08
Penn av.....	Crystal Lake av	26th av. N.....	Plank.	Both	6	1,298.3	363.52
Plymouth av.....	2d st. N.....	Wash. av. N.....	A. S....	North....	12	119.	190.40
Plymouth av.....	Wash. av. N.....	3rd st. N.....	A. S....	Both	12	493.	788.83
Plymouth av.....	3rd st. N.....	5th st. N.....	A. S....	South....	12	202.	323.20
Plymouth av.....	5th st. N.....	Lyndale av.....	A. S....	North....	12	95.	152.00
Plymouth av.....	Girard av.....	Humboldt av.....	Plank.	Both	6	475.6	133.17
2nd st. N.....	3rd av.....	Plymouth av.....	Asph..	Both	8	2,828.9	2,913.78
2nd st. N.....	24th av.....	26th av.....	Plank.	Both	8	767.	255.67
6th av. N.....	3rd st.....	5th st.....	Plank.	Both	8	1,250.	416.68
6th av. N.....	Humboldt av.....	James av.....	Plank.	North....	6	390.2	109.25
6th av. N.....	Oak Lake av.....	Lyndale av.....	A. S....	North....	6	419.5	352.38
6th av. N.....	Hoag av.....	Bradford av.....	A. S....	North....	6	281.5	236.49
6th st. N.....	6th av.....	7th av.....	Plank.	Both	6	457.	127.96
7th av. N.....	2nd st.....	Wash. av.....	A. S....	Both	6	712.2	598.30
7th av. N.....	5th st.....	Oak Lake av.....	Plank.	Both	6	1,504.6	421.32
3rd st. N.....	5th av.....	6th av.....	Plank.	South....	8	170.	56.68
3rd st. N.....	6th av.....	7th av.....	A. S....	West	8	238.5	267.12
3rd st. N.....	10th av.....	12th av.....	Plank.	West	8	417.6	139.25
3rd st. N.....	12th av.....	14th av.....	A. S....	Both	6	1,170.5	983.22
3rd st. N.....	14th av.....	20th av.....	Plank.	Both	6	1,926.2	539.31
3rd st. N.....	22nd av.....	26th av.....	Plank.	Both	6	2,479.2	694.18
10th av. N.....	Plymouth av.....	3rd st.....	Asph..	Both	6	2,017.3	1,553.32
10th av. N.....	3rd st.....	5th st.....	Plank.	Both	6	1,338.	374.64
12th av. N.....	Girard av.....	Humboldt av.....	Plank.	Both	6	256.	71.68
21st av. N.....	Wash. av.....	3rd st.....	Plank.	Both	6	668.	187.04
21st av. N.....	Aldrich av.....	Irving av.....	Plank.	Both	6	3,987.9	1,116.61
23rd av. N.....	3rd st.....	Lyndale av.....	Plank.	North....	6	1,125.5	315.14

Table No. 14—Continued.

THIRD WARD.

STREET.	FROM—	TO—	KIND.	SIDE.	Width, feet.	Length assess'd.	Amount of assess'm't.
24th av. N.	6th st.	Lyndale av.	Plank.	Both	6	739.3	\$206.92
25th av. N.	6th st.	Lyndale av.	Plank.	Both	6	652.9	182.81
25th av. N.	Emerson av.	Girard av.	Plank.	Both	6	1,330.	372.40
26th av. N.	Wash. av.	Fremont av.	Plank.	South	6	2,979.	834.12
Wash. av. N.	7th av.	8th av.	A. S.	Both	18	810.8	1,978.35
Wash. av. N.	Plymouth av.	14th av.	A. S.	Both	18	348.	849.12
Willow av.	Logan av.	Penn av.	Plank.	Both	6	1,807.5	506.10
Total.						80,557.9	\$33,839.61

FOURTH WARD.

Aldrich av.	Laurel av.	Hawthorne av.	Plank.	Both	6	475.5	133.14
Aldrich av.	Western av.	5th av. N.	Plank.	Both	6	1,429.1	400.37
Bryant av.	Western av.	5th av. N.	Plank.	Both	6	1,076.2	301.28
Cedar Lake rd.	Western av.	Bassett's creek.	Plank.	East	6	1,770.4	495.71
Chestnut av.	16th st. N.	Lyndale av.	Plank.	South	6	305.	85.40
Colfax av.	Western av.	5th av. N.	Plank.	Both	6	793.	222.04
Douglass av.	Mount Curve av.	Emerson av.	Plank.	North	6	779.	218.12
Erie av.	Hennepin av.	Lyndale av.	Plank.	North	6	325.5	91.14
11th st. S.	Hennepin av.	Harmon Place.	A. S.	West	6	350.6	294.51
11th st. N.	Hennepin av.	Hawthorn av.	A. S.	Both	6	689.	578.76
11th st. N.	Hawthorn av.	Chestnut av.	A. S.	West	6	100.	84.00
Fremont av.	Western av.	5th av. N.	Plank.	East	6	724.5	202.86
1st av. N.	4th st.	5th st.	A. S.	North	8	177.	198.24
4th av. N.	Aldrich av.	Colfax av.	Plank.	Both	6	1,103.2	308.88
4th av. N.	Knox av.	Morgan av.	Plank.	Both	6	1,067.8	298.98
4th av. N.	Newton av.	Penn av.	Plank.	South	6	556.9	155.93
5th av. N.	Lyndale av.	Colfax av.	Plank.	Both	6	1,503.8	421.04
5th av. N.	Colfax av.	Girard av.	Plank.	Both	6	2,176.	609.28
5th av. N.	Newton av.	Penn av.	Plank.	Both	6	1,087.2	304.48
14th st.	Nicollet av.	Spruce Place.	Plank.	Both	6	774.6	217.44
15th st.	Nicollet av.	Spruce Place.	Plank.	Both	6	788.1	220.66
15th st. N.	Hennepin av.	Hawthorn av.	A. S.	Both	6	853.5	716.94
15th st. N.	Linden av.	Chestnut av.	Plank.	Both	6	463.5	129.78
Girard av.	Western av.	5th av. N.	Plank.	East	6	621.1	173.94
Grant st.	Nicollet av.	Spruce Place.	Plank.	Both	6	681.5	190.82
Groveland av.	Hennepin av.	Hillside Place.	Plank.	Both	6	2,184.3	611.38
Groveland av.	19th st.	Clifton Place.	Plank.	North	6	1,262.	353.50
Harmon Place.	11th st. S.	13th st. S.	A. S.	Both	6	779.5	654.78
Hawthorn av.	Aldrich av.	Bryant av.	Plank.	Both	6	514.5	144.06
Holden st.	9th st. N.	12th st. N.	A. S.	South	6	931.	782.04
Laurel av.	Hennepin av.	15th st.	A. S.	North	6	227.5	191.10
Laurel av.	15th st.	16th st.	A. S.	South	6	102.5	86.10
Laurel av.	16th st.	17th st.	A. S.	South	6	102.5	86.10
Lyndale av.	Groveland av.	Franklin av.	Plank.	East	8	1,427.4	475.87
Laurel av.	Lyndale av.	Aldrich av.	Plank.	South	6	292.5	81.90
Laurel av.	Bryant av.	Dupont av.	Plank.	North	6	430.5	120.54
Linden av.	16th st. N.	Lyndale av.	Plank.	South	6	324.8	90.96
Linden av.	17th st. N.	Lyndale av.	Plank.	North	6	168.5	47.23
Linden av.	Aldrich av.	Bryant av.	Plank.	South	6	192.	53.76
Lyndale av.	Chestnut av.	Laurel av.	Plank.	East	6	622.	174.16
Lyndale av.	Laurel av.	Erie av.	Plank.	Both	6	928.3	259.92
Lyndale av.	R. R. bridge.	6th av. N.	Plank.	Both	6	4,175.6	1,169.02
Laurel av.	17th st.	Lyndale av.	A. S.	Both	6	218.8	183.80
Mary place.	12th st. S.	13th st. S.	A. S.	Both	6	685.6	575.83
Mt. Curve av.	Hennepin av.	Emerson av.	Plank.	North	6	1,387.9	388.61
Nicollet av.	9th st.	10th st.	A. S.	East	15	168.9	341.19
9th st. S.	Nicollet av.	1st av.	A. S.	South	15	125.	252.50
19th st.	Vine place.	Groveland av.	Plank.	North	6	50.6	14.17
Oak Grove st.	Nicollet av.	Vine place.	A. S.	North	6	170.	142.80
Penn av.	Western av.	6th av. N.	Plank.	West	6	1,137.2	318.92
Pleasant av.	Ridgewood av.	Franklin av.	Plank.	Both	6	336.1	94.11
Royalston av.	Highland av.	6th av. N.	A. S.	Both	6	749.5	629.58
16th st. N.	Hennepin av.	Laurel av.	A. S.	Both	6	732.	614.88
16th st. N.	Laurel av.	Hawthorne av.	A. S.	West	6	208.5	175.14
16th av. N.	Royalston av.	Aldrich av.	Plank.	South	6	927.7	259.74
10th st.	Hennepin av.	Mary place.	A. S.	North	6	98.	82.32
12th st. S.	Nicollet av.	Mary place.	A. S.	Both	6	264.5	296.28
12th st. S.	Mary place.	Yale place.	A. S.	East	6	616.5	517.86
13th st. S.	Hennepin av.	Yale place.	A. S.	East	6	684.5	574.98
3d av. N.	Aldrich av.	Colfax av.	Plank.	Both	6	724.2	205.59
3d av. N.	5th st.	9th st.	A. S.	South	8	458.5	513.52
Vine place.	Grant st.	Oak Grove st.	Plank.	Both	6	948.	265.44
Yale place.	13th st. S.	Spruce place.	A. S.	North	6	328.	275.52
Yale place.	12th st.	13th st.	A. S.	West	6	335.	281.40
Total.						46,693.4	\$19,439.33

Table No 14—Continued.

FIFTH WARD.

STREET.	FROM—	TO—	KIND.	SIDE.	Width, feet.	Length assess'd.	Amount of assess'm't.
Chicago av.	9th st.	17th st.	Plank.	East.	8	693.5	\$231.21
Chicago av.	16th st.	17th st.	Plank.	West.	8	104.5	34.84
Chicago av.	19th st.	24th st.	Plank.	East.	8	635.8	211.97
Clinton av.	14th st.	19th st.	Plank.	West.	6	491.1	137.51
Clinton av.	Franklin av.	24th st.	Plank.	Both.	6	546.9	153.14
Chicago av.	14th st.	16th st.	Plank.	West.	8	16.	5.34
8th av. S.	Washington av.	3d st.	A. S.	Both.	15	360.	727.20
8th av. S.	3d st.	4th st.	A. S.	East.	15	344.	694.88
8th av. S.	5th st.	10th st.	A. S.	West.	8	1,003.	1,123.36
8th av. S.	5th st.	10th st.	Plank.	East.	8	1,032.3	344.17
8th st. S.	3d av.	4th av.	A. S.	Both.	8	362.	405.44
8th st. S.	7th av.	8th av.	A. S.	South.	8	162.8	182.34
8th st. S.	8th av.	10th av.	Plank.	Both.	8	514.	171.35
8th st. S.	2d av.	3d av.	A. S.	South.	8	78.	87.36
11th st. S.	1st av.	2d av.	Plank.	North.	8	180.	60.00
11th st. S.	2d av.	3d av.	Plank.	South.	8	670.	22.34
11th st. S.	3d av.	4th av.	Plank.	North.	8	61.	20.34
11th st. S.	5th av.	6th av.	Plank.	Both.	8	475.8	158.69
18th st.	2d av. S.	Clinton av.	Plank.	North.	6	531.5	148.82
18th st.	4th av. S.	5th av. S.	Plank.	Both.	6	391.5	109.62
18th st.	5th av. S.	Chicago av.	Plank.	South.	6	794.	222.32
18th st.	Chicago av.	10th av. S.	Plank.	North.	6	310.6	86.96
Franklin av.	Nicollet av.	2d av. S.	Plank.	North.	6	258.5	72.38
Franklin av.	Stevens av.	2d av. S.	Plank.	Both.	6	260.	72.80
Franklin av.	3d av. S.	Clinton av.	Plank.	North.	6	135.	37.24
Franklin av.	4th av. S.	5th av. S.	Plank.	South.	6	252.7	70.75
Franklin av.	5th av. S.	Park av.	Plank.	Both.	6	708.4	198.35
Franklin av.	Park av.	Chicago av.	Plank.	North.	6	530.	148.40
Franklin av.	Chicago av.	10th av. S.	Plank.	Both.	6	1,250.8	350.20
Franklin av.	Park av.	Chicago av.	A. S.	South.	6	271.3	75.96
1st st. S.	3d av.	R. R. bridge	A. S.	North.	6	98.	82.32
1st av. S.	8th st.	10th st.	A. S.	East.	8	418.9	469.17
1st av. S.	10th st.	Grant st.	Plank.	East.	8	602.	200.68
1st av. S.	Grant st.	14th st.	Plank.	Both.	6	423.	118.44
1st av. S.	15th st.	17th st.	Plank.	Both.	6	987.4	276.48
1st av. S.	18th st.	22d st.	Plank.	Both.	6	2,797.5	783.30
1st st. S.	2d av.	3d av.	A. S.	North.	15	185.	373.70
4th av. S.	5th st.	6th st.	Asph.	East.	8	171.	176.13
4th av. S.	6th st.	7th st.	A. S.	Both.	8	458.	512.96
4th av. S.	9th st.	10th st.	A. S.	Both.	6	531.	446.04
4th av. S.	Grant st.	14th st.	Plank.	East.	6	65.	18.20
4th av. S.	14th st.	15th st.	Plank.	Both.	6	407.5	114.10
4th av. S.	15th st.	16th st.	Plank.	East.	6	44.5	12.46
4th av. S.	16th st.	19th st.	Plank.	Both.	6	696.	194.88
4th av. S.	Franklin av.	24th st.	Plank.	West.	6	238.8	66.86
4th av. S.	22d st.	24th st.	Plank.	East.	6	207.	57.96
4th st. S.	8th av.	10th av.	Plank.	South.	8	138.	46.00
4th st. S.	8th av.	10th av.	A. S.	North.	8	350.	392.00
5th av. S.	5th st.	6th st.	Asph.	West.	8	342.	352.26
5th st. S.	4th av.	5th av.	A. S.	North.	8	116.	129.92
5th av. S.	Franklin av.	22d st.	Plank.	West.	6	54.	15.12
5th av. S.	17th st.	18th st.	Plank.	West.	6	50.	14.00
5th av. S.	6th st.	7th st.	A. S.	Both.	8	356.	398.72
5th av. S.	8th st.	9th st.	A. S.	East.	8	244.	273.28
5th av. S.	9th st.	10th st.	A. S.	West.	8	354.	396.48
5th av. S.	11th st.	Grant st.	Plank.	West.	8	123.	41.00
5th av. S.	Grant st.	14th st.	Plank.	East.	6	57.5	16.10
5th av. S.	14th st.	16th st.	Plank.	Both.	6	469.	131.33
5th av. S.	17th st.	22d st.	Plank.	East.	6	858.	238.28
5th av. S.	22d st.	24th st.	Plank.	Both.	6	664.	185.92
5th st. S.	1st av.	2d av.	A. S.	North.	15	213.	430.26
5th st. S.	3d av.	5th av.	A. S.	South.	8	292.	327.04
5th st. S.	8th av.	10th av.	Plank.	Both.	8	784.	261.34
14th st.	Nicollet av.	2d av. S.	Plank.	Both.	6	1,627.	455.56
14th st.	3d av. S.	Clinton av.	Plank.	South.	6	153.5	42.98
14th st.	4th av. S.	5th av. S.	Plank.	South.	6	131.5	36.82
14th st.	5th av. S.	Portland av.	Plank.	North.	6	139.5	39.06
14th st.	Park av.	Chicago av.	Plank.	North.	6	467.7	130.96
15th st.	Nicollet av.	Stevens av.	Plank.	South.	6	297.	83.16
15th st.	Nicollet av.	2d av. S.	Plank.	North.	6	568.	159.04
15th st.	2d av. S.	3d av. S.	Plank.	South.	6	266.8	74.70
15th st.	3d av. S.	Clinton av.	Plank.	Both.	6	535.	149.80
15th st.	4th av. S.	5th av. S.	Plank.	Both.	6	400.5	112.14
15th st.	5th av. S.	Portland av.	Plank.	South.	6	28.8	8.06
15th st.	Portland av.	Park av.	Plank.	Both.	6	637.3	178.44

Table No. 14—Continued.

FIFTH WARD.

STREET.	FROM—	TO—	KIND.	SIDE.	Width, feet.	Length, assess'd.	Amount of assess'mt.
15th st.	Park av.	Chicago av.	Plank.	South...	6	140.	\$39.20
15th st.	Chicago av.	9th av. S.	Plank.	North...	6	158.5	44.38
15th st.	Stevens av.	2d av. S.	A. S.	South...	6	129.5	36.26
15th st.	Park av.	Chicago av.	A. S.	North...	6	278.3	233.77
Grant st.	Nicollet av.	5th av. S.	Plank.	South...	6	1,199.	335.72
Grant st.	2nd av. S.	6th av. S.	Plank.	North...	6	1,056.	295.68
Nicollet av.	Grant st.	18th st.	Plank.	East...	8	963.7	321.34
Nicollet av.	19th st.	Franklin av.	Plank.	East...	8	425.	141.70
9th av. S.	4th st.	5th st.	Plank.	West...	8	336.	112.01
9th av. S.	6th st.	7th st.	Plank.	Both...	8	405.	135.01
9th av. S.	17th st.	18th st.	Plank.	Both...	6	452.	126.56
9th st. S.	1st av.	2nd av.	A. S.	Both...	8	195.1	218.52
9th st. S.	2nd av.	4th av.	A. S.	North...	8	218.	244.16
9th st. S.	3rd av.	4th av.	A. S.	South...	8	165.	184.80
9th st. S.	5th av.	6th av.	A. S.	South...	8	177.	198.24
9th st. S.	6th av.	7th av.	A. S.	North...	8	40.	44.80
9th st. S.	7th av.	8th av.	A. S.	Both...	8	391.	437.92
9th st. S.	8th av.	9th av.	Plank.	Both...	8	773.6	267.89
19th st.	3rd av. S.	4th av. S.	Plank.	South...	6	537.5	150.50
19th st.	3rd av. S.	5th av. S.	Plank.	North...	6	686.	192.08
19th st.	5th av. S.	Park av.	Plank.	Both...	6	1,127.	315.56
Park av.	10th st.	24th st.	A. S.	Both...	8	3,253.	3,643.38
Portland av.	Grant st.	24th st.	A. S.	Both...	8	5,150.9	5,769.29
Stevens av.	Grant st.	17th st.	Plank.	Both...	6	869.9	243.58
Stevens av.	17th st.	22nd st.	Plank.	East...	6	200.	56.00
2nd av. S.	11th st.	12th st.	A. S.	East...	8	354.	396.48
2nd av. S.	4th st.	5th st.	A. S.	East...	15	164.	331.28
2nd av. S.	7th st.	8th st.	A. S.	West...	8	344.	385.28
2nd av. S.	12th st.	13th st.	Plank.	West...	8	240.	80.01
2nd av. S.	Grant st.	14th st.	Plank.	East...	6	103.3	28.92
2nd av. S.	14th st.	17th st.	Plank.	Both...	6	547.	153.16
2nd av. S.	Franklin av.	22nd st.	Plank.	East...	6	300.	84.00
6th av.	5th st.	6th st.	A. S.	East...	8	227.	254.24
6th av.	6th st.	7th st.	A. S.	West...	8	128.	143.36
6th av.	9th st.	10th st.	A. S.	West...	8	130.	145.60
6th st.	2nd av.	3rd av.	A. S.	South...	8	210.	235.20
6th st.	3rd av.	4th av.	A. S.	North...	8	73.	81.76
6th st.	5th av.	8th av.	A. S.	Both...	8	978.	1,095.36
6th st.	8th av.	10th av.	Plank.	Both...	8	838.	279.35
6½ av. S.	Franklin av.	22nd st.	Plank.	Both...	6	680.5	190.54
6½ av. S.	22nd st.	24th st.	Plank.	West...	6	354.	99.12
7th st.	1st av.	2nd av.	A. S.	South...	8	153.	171.36
7th st. S.	9th av.	10th av.	Plank.	North...	8	342.	114.02
7th st. S.	8th av.	10th av.	Plank.	South...	8	422.	140.67
7½ av. S.	18th st.	Franklin av.	Plank.	Both...	6	837.5	234.51
16th st.	1st av. S.	2nd av. S.	Plank.	North...	6	546.	152.88
16th st.	2nd av. S.	5th av. S.	Plank.	South...	6	760.5	212.94
16th st.	4th av. S.	Portland av.	Plank.	North...	6	407.	113.96
16th st.	Portland av.	Park av.	Plank.	Both...	6	579.4	162.23
17th st.	Nicollet av.	Stevens av.	Plank.	North...	6	591.5	165.62
17th st.	Stevens av.	Clinton av.	Plank.	Both...	6	1,163.5	325.78
17th st.	Clinton av.	4th av. S.	Plank.	South...	6	268.5	75.18
17th st.	4th av. S.	5th av. S.	Plank.	North...	6	269.	75.32
17th st.	5th av. S.	Portland av.	Plank.	South...	6	261.	73.08
17th st.	Portland av.	Park av.	Plank.	North...	6	382.1	107.00
17th st.	Park av.	Chicago av.	Plank.	Both...	6	924.3	259.10
17th st.	Chicago av.	10th av. S.	Plank.	South...	6	449.5	125.86
3rd av. S.	7th st.	8th st.	A. S.	East...	8	140.	156.80
3rd av. S.	8th st.	9th st.	A. S.	West...	8	354.	396.48
3rd av. S.	11th st.	12th st.	Plank.	Both...	8	469.	156.36
3rd av. S.	12th st.	Grant st.	Plank.	East...	8	150.	50.00
3rd av. S.	15th st.	16th st.	Plank.	Both...	6	100.	28.00
3rd av. S.	16th st.	17th st.	Plank.	West...	6	163.7	45.84
3rd av. S.	17th st.	18th st.	Plank.	East...	6	111.	31.08
3rd av. S.	18th st.	19th st.	Plank.	Both...	6	410.	114.80
3rd av. S.	Franklin av.	24th st.	Plank.	East...	6	839.2	234.98
3rd av. S.	Franklin av.	22nd st.	Plank.	West...	6	106.7	29.88
3rd st. S.	8th av.	9th av.	A. S.	Both...	15	308.	622.12
10th av. S.	Washington av.	4th st.	A. S.	West...	8	339.	379.68
10th av. S.	7th st.	8th st.	Plank.	West...	8	364.	121.34
10th av. S.	14th st.	Franklin av.	Plank.	West...	6	1,923.2	538.49
10th av. S.	22nd st.	24th st.	Plank.	West...	6	453.8	127.06
10th st.	1st av.	2nd av.	A. S.	North...	8	147.	164.64
10th st.	Park av.	Chicago av.	A. S.	South...	8	410.9	460.21
10th st.	7th av.	8th av.	A. S.	North...	8	171.	191.52

Table No. 14—Continued.

FIFTH WARD.

STREET.	FROM—	TO—	KIND.	SIDE.	Width, feet.	Length, assess'd.	Amount of assessm't.
12th st. S.	1st av.	4th av.	Plank.	Both	8	842.	280.72
21st st. S.	9th av. S.	10th av. S.	Plank.	Both	6	626.	175.28
22nd st.	Stevens av.	3rd av. S.	Plank.	North	8	272.	90.68
22nd st.	Clinton av.	Portland av.	Plank.	Both	8	817.3	272.48
22nd st.	Portland av.	6 $\frac{1}{2}$ av. S.	Plank.	North	8	258.1	86.06
22nd st.	Chicago av.	9th av. S.	Plank.	South	6	305.5	85.54
24th st.	4th av. S.	Portland av.	Plank.	North	6	381.	106.68
24th st.	Portland av.	6 $\frac{1}{2}$ av. S.	Plank.	North	8	258.1	86.02
24th st.	Park av.	10th av. S.	Plank.	North	8	552.5	184.21
Washington av.	4th av.	10th av.	A. S.	North	12	692.2	1,688.97
Washington av.	7th av.	10th av.	A. S.	South	12	600.6	1,464.00
Total.....						77,783.0	\$44,032.81

SIXTH WARD.

Cedar av.	1st st.	Railroad	Plank.	East	8	477.2	149.09
Cedar av.	2d st.	Washington av.	Plank.	Both	6	677.1	189.58
Cedar av.	4th st.	5th st.	A. S.	West	14	334.3	675.29
Cedar av.	5th st.	6th st.	Plank.	Both	8	689.1	229.75
Cedar av.	6th st.	7th st.	Plank.	West	8	265.9	88.65
11th av. S.	2d st.	Washington av.	A. S.	Both	8	635.	711.20
11th av. S.	Washington av.	3d st.	A. S.	West	8	242.	271.04
11th av. S.	3d st.	C. M. & St. P. R. R.	Asp.	West	8	171.	167.58
11th av. S.	4th st.	5th st.	Plank.	East	8	358.	119.34
11th av. S.	5th st.	6th st.	Plank.	Both	8	700.	233.34
11th av. S.	6th st.	7th st.	Plank.	East	8	342.	114.01
18th av. S.	7th st.	Cedar av.	Plank.	Both	8	282.	94.02
1st st. S.	13 av.	14th av.	Plank.	South	8	245.	81.67
4th st.	10th av.	12th av.	Plank.	South	8	474.	158.01
4th st.	14th av.	15th av.	Plank.	North	8	138.	46.01
4th st.	15th av.	Cedar av.	Plank.	South	8	494.	164.70
4th st.	19th av.	21st av.	Plank.	North	8	502.	167.34
5th st. S.	10th av.	19th av.	Plank.	Both	8	2,451.3	817.30
14th av. S.	1st st.	Cedar av.	Plank.	West	8	204.	68.00
14th av.	1st st.	7th st.	Plank.	Both	8	2,685.	895.10
15th av.	Washington av.	3d st.	Plank.	West	8	100.	33.34
15th av.	3d st.	4th st.	Plank.	Both	8	146.	48.67
15th av.	5th st.	6th st.	Plank.	Both	8	358.	119.35
15th av. S.	6th st.	7th st.	Plank.	West	8	45.	15.00
Locust st.	2d av. S.	River Bank.	Plank.	Both	6	591.2	165.54
Riverside av.	Cedar av.	7th st.	Plank.	Both	14	2,613.	1,384.82
19th av. S.	Bluff st.	1st st.	Plank.	Both	8	519.8	173.27
19th av. S.	1st st.	2d st.	Plank.	West	8	62.7	20.91
19th av. S.	2d st.	Washington av.	Plank.	Both	8	309.6	103.21
19th av. S.	Wash. av.	2 $\frac{1}{2}$ st.	Plank.	East	8	171.	57.00
19th av. S.	2 $\frac{1}{2}$ st.	7th st.	Plank.	Both	8	2,343.3	781.19
2d st.	11th av.	12th av.	Plank.	South	8	350.	116.68
6th st. S.	10th av.	11th av.	Plank.	South	8	165.	55.00
6th st. S.	Cedar av.	19th av.	Plank.	Both	8	685.5	228.52
6th st. S.	Riverside av.	25th av.	Plank.	Both	8	1,500.	500.32
7th st. S.	Cedar av.	13th av.	Plank.	North	8	911.	303.91
7th st. S.	10th av.	11th av.	Plank.	North	8	292.	97.34
7th st. S.	26th av.	27th av.	Plank.	North	8	358.	119.34
16th av. S.	Cedar av.	7th st.	Plank.	Both	8	1,909.	636.47
17th av. S.	Cedar av.	6th st.	Plank.	West	8	342.	114.00
17th av. S.	6th st.	7th st.	Plank.	Both	8	584.	194.67
2 $\frac{1}{2}$ st. S.	Cedar av.	19th av.	Plank.	South	8	410.	136.67
2 $\frac{1}{2}$ st. S.	19th av.	20th av.	Plank.	Both	8	513.	171.00
2 $\frac{1}{2}$ st. S.	20th av.	21st av.	Plank.	North	8	144.	48.00
3d st. S.	13th av.	15th av.	Plank.	Both	8	638.	212.69
3d st. S.	Cedar av.	22d av.	Plank.	Both	8	1,989.	663.02
10th av. S.	2d st.	Bridge	A. S.	East	4	553.1	309.74
10th av. S.	3d st.	Wash. av.	A. S.	East	8	165.	184.80
10th av. S.	3d st.	4th st.	Asph.	East	15	277.	285.31
10th av. S.	4th st.	7th st.	Plank.	East	8	718.	239.36
12th av. S.	1st st.	2d st.	Plank.	East	8	358.	119.35
12th av. S.	2d st.	Wash. av.	Plank.	West	8	171.	57.01
12th av. S.	3d st.	4th st.	Plank.	West	8	342.	114.01
12th av. S.	Wash. av.	3d st.	Plank.	East	8	171.	57.01
13th av. S.	5th st.	6th st.	Plank.	East	8	171.	57.00
13th av. S.	1st st.	2d st.	Plank.	East	8	342.	114.02
13th av. S.	2d st.	3d st.	Plank.	Both	8	1,001.	334.02
13th av. S.	3d st.	7th st.	Plank.	Both	8	1,641.5	547.23
20th av. S.	1st st.	Bluff st.	Plank.	Both	8	815.3	271.86

Table No. 14—Continued.

SIXTH WARD.

STREET.	FROM—	TO—	KIND.	SIDE.	Width, feet.	Length assessed	Amount of Assessm't.
20th av. S.	3d st.	Riverside av.	Plank.	Both	2	1,026.	342.05
20th av. S.	7th st.	Riverside av.	Plank.	Both	2	1,120.	373.40
22d av. S.	2d st.	2½ st.	Plank.	West	6	643.2	180.08
22d av. S.	Riverside av.	7th st.	Plank.	Both	2	516.1	172.06
22d av. S.	5th st.	6th st.	Plank.	West	2	267.	89.01
23d av. S.	6th st.	Riverside av.	Plank.	Both	2	502.7	167.60
24th av. S.	6th st.	7th st.	Plank.	Both	2	593.4	197.83
27th av. S.	6th st.	7th st.	Plank.	West	2	175.8	58.61
Wash. av. S.	12th av.	Cedar av.	A. S.	Both	18	1,308.	3,191.56
Wash. av. S.	Cedar av.	19th av.	Plank.	North	2	171.	57.02
Total.						43,436.1	19,460.93

SEVENTH WARD.

Bloomingt'n av	Lake st.	32nd st.	Plank.	East	8	1,199.2	399.89
18th av. S.	Lake st.	34th st.	Plank.	Both	6	4,734.1	1,325.89
15th av. S.	26th st.	28th st.	Plank.	Both	6	2,381.2	666.74
Lake st.	14th av. S.	15th av. S.	Plank.	South	2	272.4	90.82
Lake st.	15th av. S.	Bloomington av.	Plank.	South	16	161.9	100.38
Lake st.	18th av. S.	Cedar av.	Plank.	South	2	255.7	85.24
16th av. S.	25th st.	28th st.	Plank.	Both	6	3,282.8	919.10
12th av. S.	26th st.	28th st.	Plank.	Both	6	2,414.	675.92
28th av. S.	28th st.	Lake st.	Plank.	Both	2	2,305.2	798.57
28th st.	Cedar av.	Hiawatha av.	Plank.	North	2	683.	227.67
29th av. S.	26th st.	27th st.	Plank.	Both	2	1,193.8	397.96
Total.						18,973.3	\$5,688.18

EIGHTH WARD.

Aldrich av.	Franklin av.	25th st.	Plank.	Both	6	3,610.2	1,010.95
Aldrich av.	Lake st.	31st st.	Plank.	Both	6	672.1	188.19
Blaisdell av.	31st st.	32d st.	Plank.	West	2	597.7	199.32
Bryant av.	Franklin av.	24th st.	Plank.	Both	6	2,467.8	690.99
Clinton av.	27th st.	31st st.	Plank.	Both	6	4,447.8	1,245.64
Colfax av.	Hennepin av.	24th st.	Plank.	East	6	1,022.	286.17
Dupont av.	27th st.	28th st.	Plank.	West	6	456.3	127.76
Emerson av.	27th st.	28th st.	Plank.	Both	6	1,183.7	331.43
Franklin av.	Lyndale av.	Emerson av.	Plank.	South	2	1,319.1	439.76
Fremont av.	27th st.	28th st.	Plank.	Both	6	868.3	243.13
1st av. S.	33rd st.	34th st.	Plank.	West	6	605.2	169.46
1st av. S.	24th st.	27th st.	Plank.	Both	6	1,945.	544.59
4th av. S.	26th st.	27th st.	Plank.	West	6	493.4	138.14
4th av. S.	27th st.	28th st.	Plank.	Both	6	1,241.8	347.72
5th av. S.	Lake st.	32d st.	Plank.	Both	6	2,055.8	575.63
Garfield av.	25th st.	26th st.	Plank.	West	6	519.7	145.52
Garfield av.	26th st.	27th st.	Plank.	East	6	418.1	117.07
Garfield av.	27th st.	28th st.	Plank.	Both	6	1,183.7	331.42
Grand av.	Lake st.	31st st.	Plank.	West	6	385.6	107.97
Hennepin av.	32nd st.	34th st.	Plank.	West	6	1,144.9	320.66
Lake st.	Nicollet av.	Stevens av.	Plank.	Both	2	1,078.9	359.72
Lake st.	3rd av.	Park av.	Plank.	South	2	1,654.	551.66
Lake st.	Park av.	Chicago av.	Plank.	North	2	396.3	132.11
Lake st.	Lyndale av.	Hennepin av.	Plank.	North	2	2,167.9	722.69
Lake st.	Hennepin av.	Lake Calhoun.	Plank.	South	6	1,884.8	536.96
Lindley av.	29th st.	29½ st.	Plank.	Both	2	576.5	192.18
Lindley av.	Lake st.	31st st.	Plank.	Both	2	1,151.4	384.03
Lyndale av.	Franklin av.	26th st.	A. S.	Both	2	4,488.9	5,027.63
Lyndale av.	24th st.	27th st.	Plank.	East	2	606.5	202.18
Lyndale av.	27th st.	29th st.	Plank.	West	2	1,118.4	372.90
Nicollet av.	29th st.	29½ st.	Plank.	West	2	45.	15.00
Nicollet av.	33d st.	34th st.	Plank.	West	2	563.1	187.77
Nicollet av.	26th st.	27th st.	Plank.	Both	2	466.8	155.66
Park av.	24th st.	26th st.	A. S.	Both	2	1,373.3	1,538.10
Park av.	26th st.	31st st.	Plank.	Both	2	5,339.7	1,780.38
Pleasant av.	33d st.	34th st.	Plank.	Both	2	1,033.	344.42
Portland av.	28th st.	Lake st.	Plank.	West	2	956.8	319.05
Sheridan av.	Franklin av.	21st st.	Plank.	West	6	701.	196.28
Stevens av.	28th st.	29th st.	Plank.	Both	6	511.3	143.16
Stevens av.	25th st.	28th st.	Plank.	Both	6	3,318.9	929.63
2d av. S.	28th st.	Lake st.	Plank.	Both	6	1,118.2	313.10
6½ av. S.	24th st.	25th st.	Plank.	Both	6	993.8	253.04
6½ av. S.	25th st.	27th st.	Plank.	West	6	931.	260.68
7½ av. S.	24th st.	25th st.	Plank.	Both	6	915.4	256.31

Table No. 14—Continued.

EIGHTH WARD.

STREET.	FROM—	TO—	KIND.	SIDE.	Width, feet.	Length assessed	Amount of assessm't.
3d av. S.	25th st.	26th st.	Plank.	Both	6	430.	\$120.40
3d av. S.	28th st.	Lake st.	Plank.	Both	6	2,034.2	569.57
21st st.	Kenwood Boul.	Railroad.	A. S.	South	6	715.4	600.96
22d st.	Lyndale av.	Hennepin av.	Plank.	Both	6	1,990.4	557.44
25th st.	Nicollet av.	1st av. S.	Plank.	Both	6	342.1	95.79
25th st.	Stevens av.	4th av. S.	Plank.	Both	6	1,949.	545.72
25th st.	7½ av. S.	Park av.	Plank.	North	6	286.5	80.22
25th st.	Lyndale av.	Aldrich av.	Plank.	South	6	127.3	35.64
25th st.	Bryant av.	Colfax av.	Plank.	South	6	268.6	75.20
26th st.	Blaisdell av.	Stevens av.	Plank.	Both	8	1,425.1	475.12
26th st.	4th av. S.	Portland av.	Plank.	Both	6	999.8	333.32
27th st.	Blaisdell av.	Lindley av.	Plank.	Both	6	684.	191.52
27th st.	3d av. S.	Portland av.	Plank.	Both	6	965.6	270.37
27th st.	Portland av.	Park av.	Plank.	Both	6	778.1	217.85
27th st.	Nicollet av.	Blaisdell av.	Plank.	Both	6	540.6	151.38
27th st.	Dupont av.	Girard av.	Plank.	South	6	816.4	228.60
27th st.	Garfield av.	Lyndale av.	Plank.	South	6	124.6	34.89
28th st.	3d av. S.	4th av. S.	Plank.	North	8	551.	183.69
31st st.	3d av. S.	Portland av.	Plank.	Both	6	1,933.9	541.49
32d st.	Nicollet av.	2d av. S.	Plank.	South	8	396.6	132.31
32d st.	3d av. S.	Portland av.	Plank.	Both	8	902.2	300.78
32d st.	Nicollet av.	Blaisdell av.	Plank.	Both	8	772.3	257.49
32d st.	Pleasant av.	Lindley av.	Plank.	Both	8	657.	219.03
33d st.	Pleasant av.	Lindley av.	Plank.	Both	6	726.1	203.29
34th st.	Nicollet av.	Pleasant av.	Plank.	North	8	1,137.6	379.33
Total.						81,294.3	\$29,334.56

NINTH WARD.

Adams st.	Summer st.	15th av. N. E.	Plank.	Both	6	4,149.	1,161.72
Central av.	8th st.	10th st.	A. S.	North	6	713.8	599.52
Division st.	Harrison st.	E. st.	A. S.	North	6	3,089.1	2,594.86
Division st.	F. st.	H. st.	A. S.	North	6	443.4	372.46
F. st.	Division st.	St. P. & N. P. Ry.	A. S.	Both	6	889.	746.76
1st av. N. E.	5th st.	Central av.	A. S.	Both	6	1,218.5	1,023.54
5th st. N. E.	4th av.	Broadway st.	Plank.	East.	6	1,907.	533.96
15th av. N. E.	Washington st.	5th st.	Plank.	Both	6	1,131.2	316.72
Harrison st.	18th av. N. E.	27th av. N. E.	Plank.	East.	6	3,575.3	1,001.08
Harrison st.	25th av. N. E.	27th av. N. E.	Plank.	West.	6	1,224.6	342.88
Jackson st.	20th av. N. E.	27th av. N. E.	Plank.	Both	6	5,207.	1,457.96
Jefferson st.	Summer st.	Broadway st.	Plank.	Both	6	1,231.	344.68
Madison st.	13th av. N. E.	17th av. N. E.	Plank.	East.	6	1,443.5	404.17
Madison st.	13th av. N. E.	15th av. N. E.	Plank.	West.	6	739.5	207.06
Madison st.	Summer st.	Broadway st.	Plank.	West.	6	606.	169.68
Monroe st.	3rd av. N. E.	Summer st.	Plank.	East.	6	1,260.5	352.94
Monroe st.	19th av. N. E.	24th av. N. E.	Plank.	Both	6	2,909.7	814.72
19th av. N. E.	Monroe st.	Harrison st.	Plank.	Both	6	2,197.	615.16
19th av. N. E.	Harrison st.	Taylor st.	Plank.	North	6	754.	211.14
Pierce st.	Division st.	Broadway st.	Plank.	Both	6	4,209.3	1,178.36
Polk st.	18th av. N. E.	26th av. N. E.	Plank.	Both	6	5,826.1	1,631.22
Spring st.	Adams st.	Jefferson st.	Plank.	North	6	264.	73.92
Summer st.	Jefferson st.	Monroe st.	Plank.	North	6	270.	75.60
Taylor st.	19th av. N. E.	26th av. N. E.	Plank.	West.	6	1,966.3	550.56
3d av. N. E.	5th st.	Jackson st.	A. S.	North	6	738.9	620.73
3d av. N. E.	5th st.	10th st.	A. S.	South	6	1,036.8	870.99
10th st. N. E.	Central av.	3rd av.	Plank.	West.	6	177.	49.56
13th av. N. E.	Washington st.	5th st.	Plank.	Both	6	1,105.9	309.65
22d av. N. E.	Jackson st.	Taylor st.	Plank.	Both	6	2,332.3	653.06
22d av. N. E.	Taylor st.	Johnson st.	Plank.	North	6	1,474.7	412.91
23d av. N. E.	Jackson st.	Filmore st.	Plank.	Both	6	2,975.	833.00
23d av. N. E.	Filmore st.	Johnson st.	Plank.	North	6	1,130.4	316.48
24th av. N. E.	Filmore st.	Taylor st.	Plank.	Both	6	687.	192.36
Total.						58,882.8	\$21,039.31

TENTH WARD.

Emerson av.	26th av. N.	30th av. N.	Plank.	Both	6	3,401.3	\$952.43
Emerson av.	30th av. N.	32d av. N.	Plank.	West	6	604.	169.12
Lyndale av.	27th av. N.	29th av. N.	Plank.	West	6	527.	147.58
Penn. av.	26th av. N.	30th av. N.	Plank.	East.	6	1,870.6	523.76
26th av. N.	1st st.	Wash. av.	Plank.	North	6	609.	195.72
26th av. N.	Lyndale av.	Fremont av.	Plank.	North	6	1,591.6	445.64
Total.						8,693.5	\$2,434.25

Table No. 14—Continued.

ELEVENTH WARD.

STREET.	FROM—	TO—	KIND.	SIDE.	Width, feet.	Length assessed	Amount of assessm't.
Butler place.	22d av. S.	23d av. S.	Plank.	South.	4	238.	\$47.60
Butler place.	24th av. S.	25th av. S.	Plank.	Both.	6	709.6	198.68
Cedar av.	Franklin av.	Alley	Plank.	West.	8	156.	52.02
Cedar av.	Franklin av.	Minnehaha av.	Plank.	East.	8	500.7	167.00
8th st. S.	10th av.	16th av.	Plank.	Both.	8	2,168.	722.80
8th st. S.	16th av.	17th av.	Plank.	North.	8	295.	98.36
8th st. S.	25th av.	Riverside av.	Plank.	South.	8	72.2	24.08
11th av. S.	7th st.	Franklin av.	Plank.	Both.	8	2,877.9	959.48
Franklin av.	10th av. S.	24th av. S.	Plank.	Both.	12	8,452.8	3,888.39
Franklin av.	30th av. S.	Franklin av. bdg	Plank.	North.	12	850.8	391.37
14th av. S.	7th st.	Franklin av.	Plank.	Both.	8	2,166.2	722.19
Minnehaha av.	Cedar av.	Franklin av.	Plank.	Both.	12	1,621.	745.22
Minnehaha av.	Franklin av.	22d st.	Plank.	East.	12	647.2	297.72
9th st. S.	20th av.	21st av.	Plank.	South.	8	358.	119.36
19th av. S.	7th st.	Franklin av.	Plank.	Both.	8	1,975.2	658.47
7th st. S.	10th av.	Cedar av.	Plank.	South.	8	2,606.4	869.06
7th st. S.	20th av.	21st av.	Plank.	South.	8	350.	116.67
16th av. S.	7th st.	8th st.	Plank.	Both.	8	519.	173.01
12th av. S.	8th st.	9th st.	Plank.	Both.	8	353.5	117.85
13th av. S.	8th st.	9th st.	Plank.	Both.	8	331.5	110.50
20th av. S.	7th st.	Franklin av.	Plank.	Both.	8	2,413.8	804.65
22d st.	24th av. S.	29th av. S.	Plank.	Both.	8	3,302.9	1,101.46
24th st.	29th av. S.	30th av. S.	Plank.	North.	8	350.5	116.88
25th av. S.	8th st.	24th st.	Plank.	Both.	8	3,882.6	1,294.59
26th av. S.	7th st.	8th st.	Plank.	Both.	8	777.5	259.56
27th av. S.	Franklin av.	24th st.	Plank.	Both.	8	2,328.8	776.48
28th av. S.	Riverside av.	8th st.	Plank.	Both.	8	1,045.1	348.85
28th av. S.	Franklin av.	24th st.	Plank.	Both.	8	2,176.6	725.79
29th av. S.	8th st.	24th st.	Plank.	Both.	8	3,667.4	1,222.88
Total.						47,193.6	\$17,130.97

TWELFTH WARD.

Bloom'ton av.	34th st.	38th st.	Plank.	Both.	8	4,998.7	1,666.74
Cedar av.	34th st.	37th st.	Plank.	Both.	8	3,121.8	1,040.97
Chicago av.	34th st.	38th st.	Plank.	East.	8	2,425.8	808.89
10th av. S.	34th st.	40th st.	Plank.	Both.	6	7,278.1	2,038.28
35th st.	Chicago av.	Bloomington av.	Plank.	Both.	6	4,261.5	1,193.17
38th st.	Chicago av.	Bloomington av.	Plank.	Both.	6	4,395.6	1,230.61
38th av. S.	49th st.	51st st.	Plank.	East.	6	1,176.8	329.50
49th st.	38th av. S.	Minnehaha av.	Plank.	South.	6	1,257.4	352.08
Total.						28,915.7	\$8,660.24

THIRTEENTH WARD.

Hennepin av.	34th st.	36th st.	Plank.	West.	6	1,300.6	364.17
Irving av.	34th st.	36th st.	Plank.	East.	6	1,220.5	341.74
Portland av.	37th st.	38th st.	Plank.	West.	8	615.2	205.15
Portland av.	38th st.	39th st.	Plank.	East.	8	614.5	204.83
34th st.	Hennepin av.	L. Calhoun boul.	Plank.	South.	8	774.	258.03
35th st.	Humboldt av.	Irving av.	Plank.	North.	6	268.	75.04
Total.						4,792.8	\$1,448.96

Summary of Table No. 14.

Width—ft.	Kind.	Assessed per lineal foot.	FIRST WARD.		SECOND WARD.		THIRD WARD.		FOURTH WARD.		FIFTH WARD.		SIXTH WARD.		SEVENTH WARD.	
			Length, feet.	Amt. of assmt.	Length, feet.	Amt. of assmt.	Length, feet.	Amt. of assmt.	Length, feet.	Amt. of assmt.	Length, feet.	Amt. of assmt.	Length, feet.	Amt. of assmt.	Length, feet.	Amt. of assmt.
4	Plank	20	17,296.5	\$4,83.12	13,648.5	\$3,821.48	54,523.5	\$15,266.52	35,109.6	\$9,834.20	41,397.5	\$11,593.59	1,911.5	\$535.50	12,812.1	\$3,587.65
6	"	28	33.5						1,427.4	475.87	14,155.2	4,719.14	35,226.2	11,744.35	5,997.7	2,000.15
8	"	33.5														
12	"	46														
14	"	53														
16	"	62														
4	Art. St.	56	21,599.7	18,143.79	19,337.7	16,243.60	3,699.7	3,032.23	8,962.5	7,527.44	907.3	762.13	553.1	509.74	161.9	100.38
6	"	84							900.	1,008.04	17,943.6	20,097.15	1,042.	1,167.04		
8	"	112														
12	"	160														
15	"	2.02														
18	"	2.44														
6	Asphalt	1.77							283.9	593.69	1,574	3,179.44	334.3	675.29		
8	"	1.03									1,292.2	3,152.97	1,308.	3,191.56		
12	"	1.47									513.	528.39	277.	285.35		
	Total.		40,578.9	\$25,342.69	32,985.9	20,065.08	80,557.9	\$33,839.61	46,693.4	\$19,439.33	77,783.	\$44,032.81	43,436.1	\$19,460.33	18,973.7	\$5,688.15
			EIGHTH WARD.		NINTH WARD.		TENTH WARD.		ELEVENTH WARD.		TWELFTH WARD.		THIRTEENTH WARD.		TOTALS.	
4	Plank	20	1,684.8	\$336.96			8,693.5	\$2,434.25	258.	\$47.60	18,369.4	\$5,143.64	2,789.1	\$780.95	1,922.8	\$384.56
6	"	28	47,118.4	13,193.15	50,753.3	\$14,210.45	709.6	198.08	34,074.8	11,561.99	10,546.3	3,516.60	2,903.7	698.01	305,132.7	\$5,442.97
8	"	33.5	25,913.5	8,637.76			11,571.2	5,322.70							143,397.	\$7,807.97
12	"	46													11,571.2	\$5,322.70
14	"	53													2,613.	1,384.82
16	"	62													161.9	100.38
4	Art. St.	56													553.1	509.74
6	"	84	715.4	600.96	8,129.5	6,828.86									63,261.8	\$3,139.01
8	"	1.12	5,862.2	6,565.73											27,806.3	\$1,145.72
12	"	1.60													909.	1,454.43
15	"	2.02													2,292.2	4,448.42
18	"	2.44													3,759.	9,172.00
6	Asphalt	1.77													2,188.3	1,730.90
8	"	1.03													3,618.9	3,727.52
12	"	1.47													1,682.7	2,355.78
	Total.		81,294.3	\$29,334.56	58,882.8	\$21,939.31	8,693.5	\$2,434.25	47,193.6	\$17,130.97	28,915.7	\$8,660.24	4,792.8	\$1,448.96	570,781.9	\$247,916.92

Total length plank walk, 464,738.6 feet; total length artificial stone walk, 98,493.4 feet; total length asphalt walk, 7,489.9 feet; grand total, 570,781.9 feet, or 108.102 miles.

Table No. 15.

ADDITIONS TO CITY OF MINNEAPOLIS APPROVED 1889.

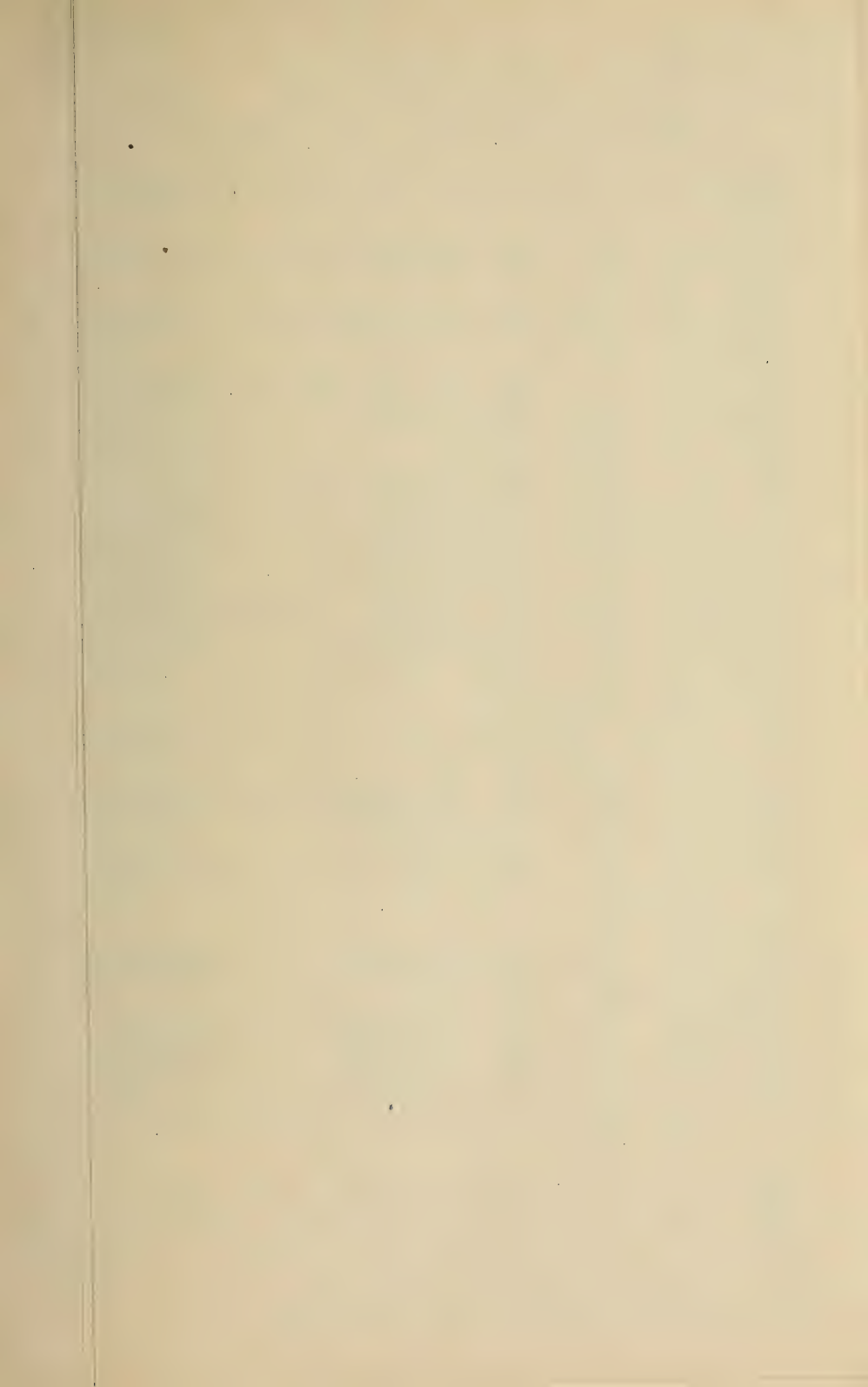
NAME OF ADDITION.	Date Approved.	No. of Lots.	Area plat'd, exclusive of rearrangements, subdivisions, etc., square ft.
Amendment to Calhoun Park.....	August 2.....	60.....	.....
Bartlett's C. A.....	Sept. 27.....	60.....	435,600
Best's Nicollet av.....	May 3.....	240.....	1,742,400
Blaisdell's. Robert.....	Dec. 20.....	420.....	3,049,200
Bonham's subdivision of block 17, Cobb's add. to St. Anthony	May 17.....	21.....	.....
Bovey & Delaittre's rearrangement block 6, Elwell's 2d.....	Oct. 11.....	40.....	.....
Bradford & Bassett's 2d.....	July 5.....	18.....	.....
Butler's Brookside.....	May 11.....	310.....	4,224,000
Burnett Park.....	June 21.....	60.....	435,600
California Park.....	April 19.....	60.....	435,600
Calhoun Terrace.....	May 3.....	240.....	1,742,400
Carlson's subdivision block 11, Park addition.....	Nov. 1.....	4.....	.....
Cherry Hill.....	August 30.....	16.....	141,020
Child's rearrangement lots 1, 2 and 3, block 2, Lakeview.....	Sept. 13.....	12.....	.....
Cleveland Park.....	Nov. 1.....	35.....	153,600
Demming's, Polk street rearrangement.....	July 5.....	12.....	.....
Farnham's 2d.....	March 15.....	8.....	46,700
Filteau's.....	June 6.....	38.....	.....
Franklin avenue rearrangement block 37, Murphy's.....	April 5.....	23.....	.....
Gale's rearrangement lots 1 and 2, block 33.....	Feb. 15.....	6.....	.....
Gille's subdivision of lots 14 and 15 Menage's supplement to East Side.....	July 5.....	4.....	.....
Kenwood, rearrangement.....	August 9.....	43.....	.....
Lauderdale s, W. H.....	Nov. 1.....	118.....	871,200
Lauderdale's Shingle Creek.....	Dec. 20.....	32.....	217,800
McCaull's subdivision of lots 48, 49, 50 and 51, block 1, Hamilton & Brown's.....	April 19.....	6.....	.....
McNair Park.....	Dec. 20.....	700.....	9,853,600
Menage's 6th.....	Feb. 1.....	17.....	.....
Morgan's.....	March 22.....	26.....	210,000
Newton & Fowell's.....	April 19.....	240.....	1,742,400
Newcomb's.....	Sept. 13.....	120.....	871,200
Nettleton & Thurber's rearrangement of lots 1 and 2, block 6, Rigewood.....	Sept. 27.....	2.....	.....
Oak Park supplement.....	Sept. 27.....	207.....	1,742,400
Polk street subdivision.....	May 17.....	20.....	.....
Remington Park, 1st division rearrangement in blocks 9 and 10.....	Dec. 20.....	35.....	.....
Roland Park.....	March 1.....	60.....	435,600
Stetson, Page & Smith's subdivision of lots in block 2, Nicollet Island.....	June 21.....	8.....	.....
Turner's rearrangement of lots 13 to 21, block 1, Parker's.....	June 21.....	14.....	.....
Water's 2d rearrangement in.....	Sept. 6.....	12.....	.....
Willet's, O. W., rearrangement of lots 1 and 2, block 3, Regent's.....	June 18.....	3.....	.....
Wright's 1st.....	Nov. 29.....	.....	.....
Total.....	.....	3,360.....	*28,350,320

*650.83 acres.

Table No. 16.

NEW BRIDGES UNDER CONSTRUCTION, BRIDGE REPAIRS AND MAINTAINANCE.

BRIDGES UNDER CONSTRUCTION.		Expenditures.	Totals.
Hennepin av. steel arch, over Mississippi River (2d half).....			
First street N., over twentieth avenue N.....		\$7.20	
Western avenue, over railroads (widening).....		\$280.00	
			\$287.20
REPAIRS AND MAINTAINANCE.			
Second street N., over railroads.....		\$102.19	
University avenue, over railroads.....		17.35	
Irving avenue, over Shingle Creek.....		38.96	
First avenue N., over railroads.....		102.38	
Hiawatha avenue, over Minnehaha Creek.....		3.90	
Hennepin avenue, over railroads (bridge square).....		10.50	
Lake street, over Mississippi River (approaches).....		973.13	
Lyndale avenue, over Minnehaha Creek.....		101.60	
Portland avenue, over Minnehaha Creek.....		6.65	
Twentieth avenue N., over Mississippi River.....		4.24	
Hennepin steel arch, Mississippi River (lamp posts, etc.).....		734.08	
Sixth avenue N., over Kegan's Lake.....		38.42	
Tenth avenue N., over Bassett's Creek.....		50.98	
Plymouth avenue, over Mississippi River.....		1,319.09	
Washington avenue, over Mississippi River.....		194.57	
Tenth avenue S., over Mississippi River.....		1,280.90	
Suspension, over Mississippi River.....		81.64	
Sixth avenue S., over canal.....		42.98	
Western avenue, over railroads.....		225.05	
Tools and general repairs.....		138.09	
			\$5,466.70
NEW BRIDGES COMPLETED DURING 1889,			
Hennepin Island, over Mississippi River.....		4,894.18	
Washington avenue, over Bassett's Creek (widening).....		3,684.84	
Lyndale avenue, over railroads.....		20,835.40	
Franklin avenue, over Mississippi River, completed in 1888, but last payment made in 1889.....		30,195.33	
Fifth avenue N., over Bassett's Creek.....		1,942.00	
Western avenue, over Bassett's Creek.....		1,653.70	
			\$63,205.45
			\$68,959.35



BRIDGES.—Supplement to Table No. 16.

Name	Cover	Kind	SPANS			Length Feet	ROADWAY		SIDEWALKS		PILES AND ABUTMENTS		Height of roadway above water	Condition	Year built	Cost of Substructure per foot	Cost of Super- structure	Total Cost including Appurtenances	REMARKS	
			Kind	No.	Length Feet		Width in feet	Kind	Width in feet	No.	Kind	Material								Foundation
First St. N.	Mass. span over	Iron Pratt truss	Deck	1	172															
Hennepin Co.	Iron bridge, Mass. span over	Wooden truss	Deck	1	200	10.25	18	Cedar block	6	2	Pine plank	Granite, blue and red wing limestone	Lime rock and sand rock	1880		1888	\$27,900.00	\$87,131.43	\$115,031.43	
			Deck	1	28															
			Deck	1	12															
			Deck	6	40															
Hennepin and Ramsey Counties	Western bridge, Mass. span over	Three iron truss	Deck	3	300	34	Oak plank				Timber	Lime rock			1880			489,418	Built in 1875, widened in 1880.	
			Deck	2	248	544	28	Cedar block	12	4	Oak plank	Mankato limestone and granite	Sand rock			1888	186,740.00	78,991.00	188,161.81	Center pier built on caissons by pneumatic process, center lot for complete bridge to full width, 81 feet
			Deck	2	156															
			Deck	1	123															
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	1,150	18	Cedar block	6	2	Pine plank	Blue and red wing limestone	Sand rock and gravel	1880		1882	110,000.00	100,000.00	210,000.00	Built by Hennepin and Ramsey counties
			Deck	1	150	1,561	18	Oak plank	6	2	Pine plank	Blue limestone	Piling				68,500.00		Wood stringers	
			Deck	2	54															
			Deck	1	60	354	8	Granite	8	2	Oak plank	Blue limestone and red wing stone	Sand rock	1878				70,000.00		
Ramsey Co.	Western bridge, Mass. span over	Stone arch	Deck	1	60	620	19	Cedar block	9	2	Oak plank	Blue limestone	Sand rock	1876				221,241.00	Conditioned, contract let for removing	
			Deck	2	164															
			Deck	2	167	1,113	17 1/2	Oak plank	5	2	Pine plank	Blue limestone	Lime rock debris	1879				160,000.00	Wooden stringers	
			Deck	1	209	805	36	Cedar block	6	2	Pine plank	Mankato limestone	Piling	1888		18,468.80	86,254.72	104,723.52		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	4	193															
			Deck	2	159	1,084	18	Oak plank	6	2	Pine plank	Blue limestone and Mankato stone	Lime rock, sand rock and gravel	1880		51,500.00	51,500.00	103,000.00		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	66	14	Earth	15	2	Pine plank	Blue limestone and Mankato stone	Earth	1880		9,341.60		181,341.60	Temporary bridge	
			Deck	1	28	40	18	Pine plank	15	2	Pine plank	Blue limestone	Timber strillage	1880		224.00		224.00		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	22	26	22 1/2	Earth	15	2	Pine plank	Blue limestone	Timber strillage	1880		28		28		
			Deck	1	25	29	22 1/2	Earth	15	2	Pine plank	Blue limestone	Timber strillage	1880		16		16		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	22	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1880		12		12		
			Deck	1	16	24	44	Earth	8	1	Pine plank	Blue limestone	Timber strillage	1880		6		6		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	20	68	Earth	15	2	Pine plank	Blue limestone	Timber strillage	1880		10		10		
			Deck	1	20	30	52 1/2	Earth	15	2	Pine plank	Blue limestone	Timber strillage	1880		10		10		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	52 1/2	Earth	15	2	Pine plank	Blue limestone	Timber strillage	1880		10		10		
			Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1880		12		12		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	41	52 1/2	Earth	15	2	Pine plank	Blue and Mankato limestone	Piling	1884		10,631.63		10,631.63	Originally stone arch; changed in 1888	
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84	[widening cost \$3,684.84]	
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49	Widened in 1880 to 100 ft., original cost \$5,000. Originally built in 1888; rebuilt in 1880	
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.51		6,899.51		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	20	30	64	Earth	18	2	Stone	Blue limestone	Timber strillage	1884		8,684.84		8,684.84		
			Deck	1	16	20	44	Pine plank	6	2	Pine plank	Blue limestone	Timber strillage	1884		1,980.49		1,980.49		
Ramsey Co.	Mass. span over	Iron Pratt truss	Deck	1	17	21	42	Pine plank	12	2	Pine plank	Blue limestone	Timber strillage	1884		10,631.63		10,631.63		
			Deck	1	29	28	42	Earth	12	2	Pine plank	Blue and red wing limestone	Piling	1880		6,899.5				



Franklin Avenue Bridge.



Steel Arch Bridge.

Table No. 17.

AMOUNT AND COST OF LUMBER UNDER THE DIRECTION OF THE CITY ENGINEER'S DEPARTMENT, -1889.

WARD.	NUMBER OF FEET, BOARD MEASURE.					Total feet.	Total cost.
	Sun-dries.	Cul-verts.	Cross walks.	Side-walk rep'rs.	Side-walks.		
First.....		1,152	20,908	3,795	8,888	34,743	\$437.66
Second.....		11,043	9,097	19,200	60,126	99,466	1212.20
Third.....		5,207	20,694	27,404	316,133	369,438	4,469.77
Fourth.....	304		27,112	19,057	134,848	181,321	2,207.75
Fifth.....	1,349		17,483	17,634	171,333	207,799	2,533.93
Sixth.....			9,810	6,063	196,363	212,236	2,556.92
Seventh.....		480	21,488	5,368	98,571	125,907	149,963
Eighth.....		768	34,800	2,907	272,180	310,655	3,773.67
Ninth.....			11,982	2,820	224,318	239,120	3,542.55
Tenth.....			1,160			5,322	64.91
Eleventh.....			32,819	28,031	347,646	308,496	4,345.52
Twelfth.....		3,264	9,471		29,797	42,532	551.83
Thirteenth.....		1,088				1,088	16.32
City Hall repairs.....						1,923	70.64
Cedar block paving repairs.....						9,865	131.69
Cedar block paving repairs, conduits.....						3,139	39.94
Bridges and bridge repairs.....						121,638	1,574.96
North Mpls. pumping station.....						24,129	380.69
S. E. Dump.....						2,820	35.31
Sewers.....						1,393,548	16,588.82
Sewer tunnel, N. Minneapolis.....						130,921	1,634.33
Sewer tunnel, S. W. Minneapolis.....						37,984	379.31
Sewer tunnel, N. E. Minneapolis.....						48,156	624.41
Sewer tool houses.....						3,100	39.80
Sewer tunnel out falls.....						3,175	47.02
Sewer tunnel out falls, N.E. Mpls.....						1,696	22.05
Straightening Bassett's creek.....						1,500	20.25
General account sewers.....						24,839	424.23
Total, pine lumber.....	1,653	27,164	216,824	132,279	1,760,203	3,936,556	\$49,226.11
OAK.							
Bridges and bridge repairs.....						50,924	895.62
N. Minneapolis pumping station.....						844	30.10
Total oak lumber.....						51,768	925.72

Table No. 18.

PUBLIC BUILDINGS, CONSTRUCTED OR REPAIRED, WATERING FOUNTAINS, ETC., AS DIRECTED BY THE CITY ENGINEER'S DEPARTMENT, 1889.

City hall, repairs, ventilation, furniture, etc.....	\$1,973.98
Hose house, Twenty-Fourth av. N. E. and Harrison.....	3,010.90
S. E. dump.....	138.96
Watering troughs and fountains.....	469.31
North Minneapolis pumping station.....	208,965.75
Exposition illumination.....	3,000.00
Total.....	\$217,558.90

Oliver av.....	Summit av.....	Douglas av.....	November 29	Dec. 20	60	60	16,500	275	265
Ontario st.....	Summit av.....	Douglas av.....	November 29	Oct. 11	66	66	10,098	153	205
Plymouth av.....	River road.....	River.....	November 29	Oct. 11	66	66	150	153	205
Polk st.....	Grand av.....	Humboldt av.....	Pending.....		10	80	111		
Stevens av.....	18½ av. N. E.....	24th av. N. E.....	Pending.....		60	60	9,200	80	80
Stock Y and road.....	Stillman's add.....	29th st.....	Pending.....		60	60	340	60	60
Spring st.....	Division st.....	Centerline of sec. 7-29-23	Pending.....		60	60	112	60	60
2d av. S.....	Jackson st.....	Harrison st.....	Pending.....		60	60	1835	60	60
7th st. N.....	Stillman's add.....	29th st.....	Pending.....		60	60		60	60
16th av. S.....	2d av.....	Hoag av.....	Pending.....		30	60	26,514	685	
17th av. S.....	27to st.....	Lake st.....	Court award.....		40	60	75,624	1,352	
17th av. S.....	24th st.....	Lake st.....	Court award.....		40	80	2,970	297	
Taylor st.....	18½ av. N. E.....	24th av. N. E.....	November 29		10	80	23,628	358	320
Thornton st.....	River road.....	River.....	October 4	Oct. 11	66	66			
10th av. S.....	34th st.....	35th st.....	Pending.....		60	60	263		
22d st.....	3d av. S.....	4th av. S.....	Pending.....		60	70	269		
13th av. S.....	31st st.....	34th st.....	August 2		60	60	1,595	940	
25th av. N. E.....	Johnson st.....	Centreville road.....	October 4		60	60	137,500	2,750	
28th st.....	Cedar av.....	Hiawatha av.....	Pending.....		60	60	15,087	250	
33d st.....	10th av. S.....	11th av. S.....	August 2		60	60	6,160	264	
34th av. S.....	4th st.....	48th st.....	November 29	Irregular	60	60	81,960	1,652	
35th st.....	3d av. S.....	Park av.....	November 15		30	60	43,200	1,080	
36th st.....	3d av. S.....	Portland av.....	November 15		40	80	176,650	2,500	
Univ. av. S. E.....	Oak st.....	E. city limits.....	May 4		20	120	3,200	320	
Vinland place.....	Lyndale av.....	Bryant av.....	March 1	Decided	10	70	72,163	1,328	
Wash. av. N.....	34th av. N.....	2d st.....	Pending.....	Irregular	66	66	260		
Wash. av. N.....	19th av.....	20th av.....	Pending.....	Irregular	103	103			
Bassett's creek.....	3d st. N.....	100 ft. S. of Western av. Straightening.....	Aug. 30		20	20		5,609	
Total.....							17,698	43,783	2,294
							2,130,683		

8,202 miles, or 46.6 acres of streets opened.

Table 26.
ALLEYS OPENED AND VACATED JANUARY 1, 1889, TO JANUARY 1, 1890.

ALLEY IN BLOCK.	ADDITION.	Opening or	Proceed- ings con- firmed.	Resolu- tion va- cating.	Deed accepted.	Width opened —feet.	Width of alley —feet.	Width vacated —feet.	Sq. ft. opened.	Length opened —feet.	Length vacated —feet.
1.	North of Clasen's add.	O	May 17.	July 7.		14	14		3,289	219	150
6.	L. H. Cole	V		July 19.	Deeded	14	14	12	3,612	258	132
6.	Crim's 2d	V		July 19.		12	12	12	1,300	100	
Unplatted.	Hugler's add. to 22d st.	O	Oct. 4.			12	12		2,340	195	
2.	Maxes resurvey	O	Oct. 4.		Deeded	14	14	14	3,300	250	
31.	Minnehaha	O		July 19.				14			197
31.	Minnehaha	V		Oct. 11.		10&18	10&18			222	603
37 and 23	Meeker Island Land and Power Co.	V		May 17.		14	14	165	2,668		178
25.	Murphy	O		July 19.	Deeded	12&16	12&16		3,906	279	
23.	South side.	V							4,400	300	
23.	South side.	O									
11.	Wilson, Bell, Wagner.	O	Aug. 2.								
Total.									24,895	1,823	1,260

Table No. 21.

LEVELS RUN, GRADES, ORDERS, SURVEYS, ETC.

STREET.	FROM—	TO—	Length of levels run, feet.
Abbott av.....	Horse Shoe lake.....	Aonian av.....	1,018
Abbott av.....	Halloran's lake.....	Chestnut av.....	1,203
Abbott av.....	36th st.....	54th st.....	11,840
Aldrich av.....	11th av. N.....	12th av. N.....	681
Aldrich av.....	50th st.....	51st st.....	660
Antoinette av.....	Superior av.....	Eden av.....	1,646
Aonian av.....	Young av.....	Beard av.....	1,000
Arra av.....	Lamie av.....	Abbott av.....	1,099
Barne's Place.....	Humboldt av.....	Irving av.....	500
Beard av.....	Superior av.....	Western av.....	3,760
Beard av.....	36th st.....	54th st.....	11,840
Belmont av.....	50th st.....	Minnehaha boulevard.....	2,139
Bryant av.....	50th st.....	52d st.....	1,310
Chicago av.....	16th st.....	Franklin av.....	1,623
Chicago av.....	27th st.....	Lake st.....	1,930
Chowen av.....	Beard av.....	Chestnut av.....	606
Chowen av.....	Lake View av.....	Devil's Glen.....	1,913
Colfax av.....	Boulevard.....	50th st.....	1,352
Crystal Lake av.....	Penn av.....	Xerxes av.....	4,511
Douglass av.....	Beard av.....	France av.....	1,321
Drew av.....	Superior av.....	Western av.....	4,115
Dupont av.....	11th av. N.....	12th av. N.....	681
Dupont av.....	20th av. N.....	25th av. N.....	2,068
Dupont av.....	48th st.....	54th st.....	3,960
Eden av.....	Minnetonka av.....	Manitoba av.....	954
Elwood av.....	Gladstone av.....	3d av. S.....	2,723
Elwood av.....	6th av. N.....	Plymouth av.....	3,223
Emerson av.....	46th st.....	52d st.....	3,960
Erie av.....	Penn av.....	France av.....	5,283
Ewing av.....	Douglass av.....	Chestnut av.....	3,931
8th av. N.....	Elwood av.....	Dupont av.....	2,350
8th av. N.....	Sheridan av.....	Xerxes av.....	1,650
8th av. S.....	4th st.....	9th st.....	2,050
8th st. S.....	Nicollet av.....	1st av.....	410
Florence av.....	Hawthorne av.....	Chestnut av.....	655
France av.....	Douglas av.....	Western av.....	3,895
Franklin av.....	8th av. S.....	11th av. S.....	1,128
Fremont av.....	46th st.....	52d st.....	3,741
1st av. S.....	13th st.....	15th st.....	920
1st av. S.....	22d st.....	27th st.....	2,608
4th av. N.....	Penn av.....	Sheridan av.....	992
5th av. N.....	Penn av.....	Sheridan av.....	992
14th av. S.....	18th st.....	Franklin av.....	886
40th st.....	Park boulevard.....	Beard av.....	3,267
41st st.....	Sheridan av.....	Beard av.....	2,820
42d st.....	Cedar av.....	34th av. S.....	6,270
42d st.....	Boulevard.....	Xerxes av.....	2,465
43d av. S.....	50th st.....	54th st.....	2,641
43d st.....	Park boulevard.....	Xerxes av.....	1,870
44th av. S.....	51st st.....	54th st.....	2,962
44th st.....	Lake Harriet boulevard.....	Beard av.....	3,330
45th av. S.....	Hiawatha av.....	54th st.....	2,057
45th st.....	Upton av.....	Beard av.....	2,309
46th av. S.....	Hiawatha av.....	54th st.....	1,635
46th st.....	Upton av.....	Beard av.....	2,311
47th st.....	Lake Harriet.....	Beard av.....	2,683
48th st.....	Thomas av.....	Beard av.....	2,641
48th st.....	Cedar av.....	39th av. S.....	7,940
48th st.....	Dupont av.....	Irving av.....	1,650
49th st.....	Pleasant av.....	Nicollet av.....	1,330
49th st.....	Dupont av.....	Knox av.....	2,310
49th st.....	Thomas av.....	Beard av.....	2,640
49th st.....	Lake Amelia.....	40th av. S.....	5,370
50th st.....	Nicollet av.....	Beard av.....	12,167
50th st.....	Lake Amelia.....	Hiawatha av.....	6,200
51st st.....	Prospect av.....	Beard av.....	9,438
51st st.....	Lake Amelia.....	42d av. S.....	8,064
52d st.....	Nicollet av.....	South View av.....	1,910
52d st.....	Thomas av.....	Beard av.....	2,640
52d st.....	Hiawatha av.....	42d av. S.....	1,650
52d st.....	Lake Amelia.....	46th av. S.....	7,515
53d st.....	Xerxes av.....	Beard av.....	1,320
53d st.....	Lake Amelia.....	46th av. S.....	9,139
54th st.....	Xerxes av.....	Beard av.....	1,320
54th st.....	Lake Amelia.....	46th av. S.....	9,582

Table No. 21—Continued.

STREET.	FROM—	TO—	Length of levels run, feet.
Garfield av.	50th st.	51st st.	795
Girard av.	8th av. N.	Plymouth av.	2,060
Girard av.	47th st.	Boulevard.	2,030
Gladstone av.	50th st.	Minnehaha boulevard.	2,031
Grant st.	Willow st.	1st av. S.	1,453
Grenada av.	Antoinette av.	St. P., M. & M. Ry.	722
Haunline av.	Clarendon av.	Seymour av.	1,324
Harmon place.	Hennepin av.	11th st.	2,540
Hawthorn av.	Thomas av.	Zenith av.	4,572
Hawthorn av.	Abbott av.	Drew av.	1,056
Hennepin av.	14th st.	Mt. Curve av.	3,360
Hennepin av.	34th st.	36th st.	1,310
Hiawatha av.	38th st.	46th av. S.	10,430
Hiawatha av.	50th st.	51st st.	838
High View.	Prospect av.	Prospect av.	676
Hill place.	44th st.	Upton av.	810
Holmes av.	34th st.	36th st.	1,310
Humboldt av.	34th st.	36th st.	1,310
Humboldt av.	Boulevard.	54th st.	4,500
I st.	Division st.	St. P. & P. Ry.	5,450
Irving av.	8th av. N.	11th av. N.	1,000
Irving av.	Irving av.	Ilion av.	780
Irving av.	19th av. N.	26th av. N.	2,775
Irving av.	Douglas av.	Mt. Curve av.	560
Irving av.	34th st.	36th st.	1,310
Irving av.	Boulevard.	54th st.	4,150
J st.	18th av. N. E.	Division st.	5,280
James av.	19th av. N.	26th av. N.	1,642
James av.	Douglas av.	Mt. Curve av.	560
James av.	Boulevard.	54th st.	3,890
K st.	Division st.	18th av. N. E.	5,335
Knox av.	19th av. N.	Crystal Lake av.	265
Knox av.	Douglas av.	Mt. Curve av.	560
Knox av.	52d st.	54th st.	1,320
Knox av.	Boulevard.	54th st.	3,952
L st.	Division st.	18th av. N. E.	5,360
Lakeview av.	Beard av.	France av.	1,324
Lake Harriet boulevard.	Around the lake.		18,732
Laurel av.	Cedar lake road.	Halloran's lake.	4,015
Logan av.	19th av.	26th av. N.	2,000
Logan av.	Douglas av.	Mt. Curve av.	560
Logan av.	Boulevard.	54th st.	3,804
Luverne av.	Elmwood av.	52d st.	1,090
Lyndale av.	Dell Place.	31st st.	6,762
Lyndale av.	50th st.	Southview av.	1,093
M st.	Division st.	18th av. N. E.	5,280
Maderia av.	Superior av.	Grenada place.	756
Manitoba av.	Penn av.	Xerxes av.	2,820
Minnehaha av.	38th st.	46th av. S.	9,500
Minnetonka av.	Superior av.	Xerxes av.	900
Morgan av.	19th av. N.	Crystal Lake av.	491
Morgan av.	Douglas av.	Mt. Curve av.	560
Morgan av.	50th st.	52d st.	1,320
Myrtle av.	Minnetonka av.	Manitoba av.	1,205
N st.	Division st.	18th av. N. E.	5,330
Newton av.	19th av. N.	23d av. N.	480
Newton av.	Hillside av.	26th av. N.	503
Newton av.	Douglas av.	Kenwood boulevard.	500
Newton av.	50th st.	52d st.	1,320
9th st. S.	29th av. S.	Riverside av.	675
O st.	Division st.	18th av. N. E.	5,280
Oliver av.	19th av. N.	23d av. N.	1,140
Oliver av.	50th st.	52d st.	1,323
P st.	Broadway st.	Division st.	3,835
Park boulevard.	40th st.	Queen av.	2,370
Penn av.	Boulevard.	54th st.	3,769
Prospect av.	Bellmont av.	52d st.	2,307
Queen av.	40th st.	52d st.	4,780
Quincy st.	20th av. N. E.	St. P. & N. P. Ry.	1,167
Railroad av.	38th st.	42d st.	2,954
Richfield av.	40th st.	Lake Calhoun boulevard.	1,550
Russell av.	26th av. N.	36th av. N.	5,280
Russell av.	50th st.	52d st.	1,316
Rustic Lodge av.	Nicollet av.	Pleasant av.	1,365
Sheridan av.	Superior av.	Plymouth av.	7,876
Sheridan av.	Laurel av.	Chestnut av.	1,317

Table No. 21—Continued.

STREET.	FROM—	TO—	Length of levels run, feet.
Sheridan av.....	40th st.....	Lake Calhoun.....	3,629
Sheridan av.....	50th st.....	52d st.....	1,316
Snelling av.....	38th st.....	42d st.....	2,954
South View av.....	Gladstone av.....	Minnehaha boulevard.....	1,300
Stevens av.....	27th st.....	32d st.....	3,225
Summit View place.....	High View av.....	Gladstone av.....	374
Superior av.....	Xerxes av.....	France av.....	2,638
7th av. N.....	Washington av.....	4th st.....	852
Thomas av.....	Superior av.....	Plymouth av.....	7,876
Thomas av.....	40th st.....	Lake Calhoun.....	1,660
Thomas av.....	48th st.....	52d st.....	2,636
10th av. N.....	Irving av.....	Xerxes av.....	4,965
23d av. N.....	Penn av.....	Xerxes av.....	2,646
34th av. S.....	42d st.....	54th st.....	7,870
36th st.....	Hennepin av.....	Lake Calhoun.....	1,482
36th st.....	Young av.....	Beard av.....	990
37th st.....	Young av.....	Beard av.....	990
38th st.....	Thomas av.....	Beard av.....	2,528
39th st.....	Sheridan av.....	Beard av.....	2,830
Upton av.....	Superior av.....	Plymouth av.....	7,878
Upton av.....	Lake Calhoun.....	52d st.....	9,682
Vincent av.....	Plymouth av.....	19th av.....	2,658
Vincent av.....	Superior av.....	Plymouth av.....	7,876
Vincent av.....	Lake Calhoun.....	43d st.....	3,835
Vincent av.....	44th st.....	52d st.....	5,266
Washburn av.....	Superior av.....	Plymouth av.....	7,876
Washburn av.....	Lake Calhoun.....	43d st.....	3,805
Washburn av.....	44th st.....	52d st.....	5,932
Washington av. N.....	20th av.....	26th av.....	2,472
Willow st.....	Harmon Place.....	Grant st.....	996
Willow av.....	Superior av.....	Myrtle av.....	858
Xerxes av.....	Plymouth av.....	St. P. M. & M. Ry.....	9,153
Xerxes av.....	Lake Calhoun.....	54th st.....	10,924
Young av.....	Superior av.....	Laurel av.....	1,358
Young av.....	36th st.....	54th st.....	11,840
Zenith av.....	Zenith av.....	Aonian av.....	1,030
Zenith av.....	Arra av.....	Chestnut av.....	1,044
Zenith av.....	36th st.....	54th st.....	11,840
Total.....			*601,577

*113.935 miles

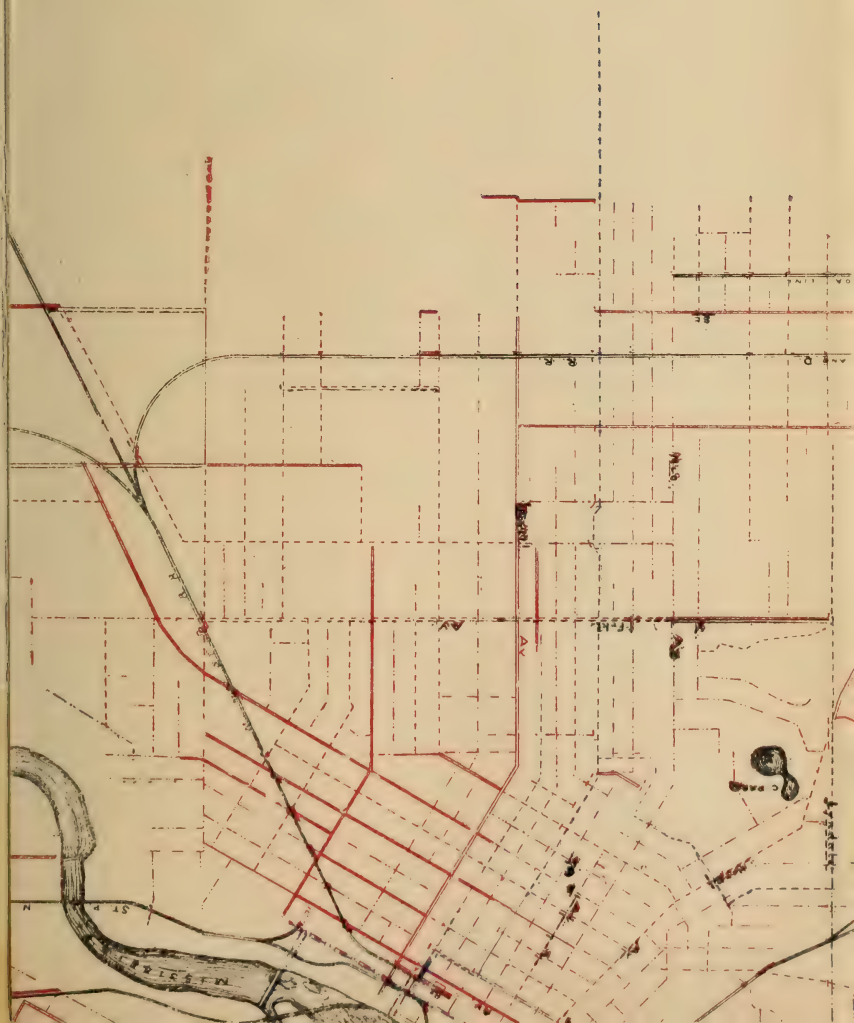
Number of grade orders.....	2,099
Number of surueys.....	257
Number of cross sections.....	132
Grade and lines given for 14 miles of sewers.....	
Grade and lines given for 10 miles of water mains.....	
Grade and lines given for 4 miles of paving.....	
Grade and lines given for 8 miles of curb.....	

Table No. 22.

WATER MAINS LAID PREVIOUS TO JANUARY 1, 1890.

STREET.	FROM—	TO—	Size— inches.	Extension No.	Year laid.	Taxes of.	Length— feet.
Adams st.	4th av. N. E.	15th av. N. E.	6	136	1886	1885	3,564.
Adams st.	15th av. N. E.	17th av. N. E.	6	266	1887	1886	795.1
Aldrich av.	Hawthorn av.	Linden av.	6	304	1887	1886	389.5
Aldrich av.	Western av.	4th av. N.	6	223	1886	1885	658.2
Aldrich av.	4th av.	6th av. N.	6	56	1884	1883	1,043.
Aldrich av.	27th st.	28th st.	6	482	1889	1889	612.2
Aldrich av.	6th av. N. 450 ft	to'rds 8th av. N	6	344	1887	1887	465.1
Alley, blocks 2	and 3 Nicollet	Island.	8	343	1888	1887	1,120.2
To Atlantic	elevator near	Shingle creek.	6	460	1889		148.5
Broadway st.	Main st.	University av.	8	118	1885	1884	891.8
Broadway st.	Univers'y av.	Adams st.	8	144	1886	1885	1,991.1
Broadway st.	Adams st.	Jefferson st.	8	212	1886	1886	322.8
Broadway st.	Jefferson st.	Monroe st.	8	120	1885	1884	658.2
Broadway st.	Monroe st.	Jackson st.	8	52	1884	1883	659.7
Broadway st.	Jackson st.	Van Buren st.	6	62	1884	1883	324.5
Broadway st.	Van Buren st.	Harrison st.	8	233	1887	1886	326.
B a sdell av.	Franklin av.	22d st.	6	320	1887	1886	610.7
Blaisdell av.	22nd st.	26th st.	6	345	1888	1887	2,004.4
Blaisdell av.	26th st.	27th st.	6	332	1887	1886	645.1
Blaisdell av.	Lake st.	33d st.	8	261	1887	1886	1,937.3
Bloom'ton av.	Franklin av.	28th st.	8	149	1886	1885	3,823.3
Bloom'ton av.	28th st.	Lake st.	8	205	1888	1886	1,306.3
Bryant av.	Western av.	20th av. N.	6	346	1888	1887	6,691.4
Cambridge st.	Oak st.	Prospect st.	12	247	1887	1886	2,781.1
Cedar av.	Wash'gton av.	2d st.	6	301	1887	1886	292.8
Cedar av.	Wash'ton av.	4th st.	6	95	1885	1884	1,175.1
Cedar av.	4th st.	5th st.	6	42	1883	1884	440.
Cedar av.	5th st.	Franklin av.	8	349	1888	1887	2,280.1
Cedar av.	Franklin av.	28th st.	8	148	1886	1885	4,030.6
Cedar av.	28th st.	34th st.	8	324	1887	1886	3,894.6
Central av.	Main st.	4th st.	16		*1881		1,284.5
Central av.	4th st.	8th st.	12		*1881		1,611.
Central av.	8th st.	9th st.	6 to 8		*1881		284.
Central av.	9th st.	3rd av. N. E.	8	6		1880	731.
Chestnut av.	11th st.	12th st.	6	338	1887	1887	352.2
Chestnut av.	12th st.	15th st.	6	163	1886	1885	656.
Chicago av.	10th st.	24th st.	8	59	1884	1883	3,514.
Chicago av.	24th st.	Lake st.	8	231	1886	1886	3,957.9
Como av.	10th av. S. E.	11th av. S. E.	6	82	1885	1884	237.5
Como av.	11th av. S. E.	Railroad.	6	82	1884	1884	232.1
Como av.	11th av. S. E.	Oak st.	12	309	1887	1886	2,244.7
Colfax av.	24th st.	27th st.	6	419	1889	1888	1,949.9
Clinton av.	Grant st.	24th st.	8	341	1887	1887	3,816.9
Clinton av.	25th st.	26th st.	6	291	1887	1886	618.1
Clinton av.	26th st.	27th st.	6	347	1888	1887	689.3
Clinton av.	27th st.	48 ft. S. 28th st	6	483	1889	1889	716.7
Clinton av.	31st st.	32d st.	6	282	1887	1886	561.8
Clifton av.	Vine Place.	Clifton Place.	6	348	1888	1887	1,871.4
Clifton Place.	Clifton av.	Groveland av	6	480	1888	1889	215.3
Division st.	5th av. S. E.	Pierce st.	6	84	1884	1884	760.8
Division st.	Piercest.	13th av. S. E.	12	243	1888	1886	1,757.3
Division st.	Harrison st.	Taylor av.	12	284	1887	1886	156.9
Dupont av.	6th av. N. 150 ft	to'rds 8th av N	8	352	1887	1886	978.8
Dupont av.	11th av. N.	16th av. N.	8	353	1888	1887	179.1
Dupont av.	16th av. N.	26th av. N.	8	251	1887	1886	2,285.2
Dupont av.	26th st.	27th st.	8	351	1888	1887	3,876.
Dupont av.	27th st.	33d st.	8	262	1887	1886	642.3
Elwood av.	6th av. N.	Irving av.	6	334	1887	1886	3,625.
Elwood av.	8th av. N.	10th av. N.	6	335	1887	1886	571.8
Emerson av.	6th av. N.	16th av. N.	6	176	1886	1885	815.6
Emerson av.	N. line lt. 14, bk	28, Gale's sub.	6				4,007.4
Emerson av.	20th av. N.	22d av. N.	6	413	1888	1888	452.2
Emerson av.	22d av. N.	24th av. N.	6	354	1888	1887	814.6
Erie av.	Lyndale av.	Hennepin av.	6	420	1888	1888	801.3
8th av. S.	Wash. av.	4th st.	6	255	1887	1886	409.1
8th av. N.	5th st.	Lyndale av.	6		*1881		848.
8th av. N.	Fremont av.	Girard av.	6	248	1887	1886	1,590.3
8th av. N.	Girad av.	Elwood av.	8	203	1887	1886	395.8
h av. N.	Elwood av.	Logan av.	6	356	1888	1887	1,119.5
h av. N. E.	University av	Sibley st.	6	337	1887	1886	415.6
h av. S.	4th st.	10th st.	8	182	1886	1885	2,058.8
h st. N.	Hennepin av.	1st av.	6	273	1887	1886	2,411.3
					*1881		380.

*Prior to 1881.



WATER MAP.

MINNEAPOLIS.



ENGINEER'S REPORT.

167

Table No. 22—Continued.

STREET.	FROM—	TO—	Size— inches.	Extension No.	Year laid.	Taxes of	Length— feet.
8th st. S.....	Hennepin av.	Nicollet av...	6	132	1886	1885	925.5
8th st. S.....	Nicollet av...	5th av. S.....	8	312	1886 1887	1886	824.1 1,286.3
8th st. S.....	5th av.....	6th av.....	12	422	1889	1888	380.9
8th st. S.....	6th av.....	7th av.....	12	414	1888	1888	410.2
8th st. S.....	7th av.....	11th av.....	12	423	1889	1888	1,644.
8th st. S.....	11th av.....	16th av.....	12	.....	*1881	.....	2,051.
8th st. S.....	16th av.....	Cedar av.....	12	.....	*1881	.....	1,200.
8th st. S.....	21st av.....	22d av.....	6	421	1889	1888	370.5
8th st. S. E.....	Central av.....	3d av.....	6	240	1887	1886	826.5
8th st. S. E.....	3d av.....	5th av.....	6	555	1888	1887	895.
11th av. N.....	5th st.....	Emerson av.....	6	178	1886	1885	2,053.2
11th av. N.....	Emerson av.....	Fremont av.....	6	249	1887	1886	406.6
11th av. S.....	2d st.....	8th st.....	12	.....	*1881	.....	2,901.
11th av. S.....	8th st.....	Franklin av.....	12	14	1882	.....	2,440.
11th av. S.....	Franklin av.....	24th st.....	12	164	1886	1885	1,275.6
11th av. N. E.....	Sibley st.....	Main st.....	8	184	1886	1885	1,191.1
11th st. N.....	1st av.....	Chestnut av.....	6	340	1886	1887	379.9
11th st. N.....	1st av.....	Western av.....	6	.....	*1881	.....	360.
11th st. S.....	Hennepin av.....	Harmon pl'c.....	6	73	1884	1884	307.
11th st. S.....	Harmon pl'c.....	74 N.....	6	86	1884	1884	103.
11th st. S.....	Harmon pl'c.....	Nicollet av.....	6	94	1885	1884	888.8
11th st. S.....	Nicollet av.....	1st av.....	6	134	1886	1885	418.4
11th st. S.....	3d av.....	4th av.....	8	358	1888	1887	393.6
11th st. S.....	4th av.....	5th av.....	8	326	1887	1886	368.2
18th av. N.....	1st st.....	2d st.....	6	152	1886	1885	401.7
18th av. S.....	Franklin av.....	24th st.....	6	357	1888	1887	1,310.3
18½ av. N. E.....	Monroe st.....	Harrison st.....	8	235	1887	1886	1,284.7
Franklin av.....	Nicollet av.....	Lyndale av.....	12	296	1887	1886	2,594.6
Franklin av.....	Nicollet av.....	Portland av.....	8	101	1885	1884	2,665.5
Franklin av.....	Portland av.....	Park av.....	6	49	1884	1883	769.7
Franklin av.....	Park av.....	Min'haha av.....	8	102	1885	1884	5,311.8
Franklin av.....	Min'haha av.....	25th av. S.....	6	71	1884	1883	1,970.9
Franklin av.....	24th av. S.....	22th av. S.....	6	105	1885	1884	201.
Fremont av.....	6th av. N.....	11th av. N.....	6	202	1886	1885	1,667.5
1st av. N.....	River.....	1st st.....	4	.....	*1881	.....	390.
1st av. N.....	Wash. av.....	5th st.....	6	.....	*1881	.....	1,286.
1st av. N.....	5th st.....	Western av.....	6	104	1885	.....	820.
1st av. N.....	Western av.....	8th st.....	6	359	1888	.....	412.
1st av. N.....	8th st.....	11th st.....	6	.....	*1881	.....	842.
1st av. N.....	11th st.....	M. & St. L. r'nd house.....	6	.....	*1881	.....	1,061.
1st av. S.....	Wash. av.....	2d st.....	6	.....	*1881	.....	455.
1st av. S.....	Wash. av.....	Center B. 63.....	6	.....	*1881	.....	605.5
1st av. S.....	Center B. 63.....	7th st.....	8	40	1884	1883	1,418.7
1st av. S.....	7th st.....	10th st.....	6	313	1887	1886	1,245.5
1st av. S.....	12th st.....	14th st.....	24	453	1889	1888	1,047.3
1st av. S.....	22d st.....	24th st.....	6	227	1886	1886	578.4
1st av. S.....	24th st.....	33d st.....	6	288	1887	1886	5,860.9
1st st.....	2d av. S.....	3d av. N.....	6	.....	*1881	.....	2,104.
1st st. N.....	3d av.....	4th av.....	6	35	1883	.....	267.5
1st st. N.....	3d av.....	4th av.....	6	35	1884	.....	468.
1st st. N.....	4th av.....	Plymouth av.....	6	115	1885	1884	2,455.8
1st st. S.....	Pump house.....	Hennepin av.....	16	26	1883	1883	2,100.
4th av. N.....	50 ft. E. of Riv	er st. to 1st st.	8	174	1886	1885	643.5
4th av. N. E.....	Main st.....	University av.....	8	28	1883	.....	801.
4th av. S.....	Wash. av.....	6th st.....	6	219	1885	1885	1,617.8
4th av. S.....	6th st.....	10th st.....	6	420	1888	1888	1,641.1
4th av. S.....	10th st.....	16th st.....	6	.....	*1881	.....	1,725.5
4th av. S.....	16th st.....	24th st.....	6	.....	*1881	.....	2,922.
4th av. S.....	24th st.....	25th st.....	6	141	1886	1885	715.5
4th av. S.....	25th st.....	26th st.....	6	367	1887	1887	617.1
4th av. S.....	32d st.....	33d st.....	6	477	1889	1888	596.7
4th st. N.....	Hennepin av.....	1st av.....	6	305	1886	1886	411.1
4th st. N.....	1st av.....	3d av.....	6	158	1886	1885	786.1
4th st. N.....	6th av.....	8th av.....	6	.....	*1881	.....	744.
4th st. N.....	8th av.....	Plymouth av.....	6	107	.....	1884	2,400.3
4th st. N.....	Plymouth av.....	15th av.....	6	4	1881	.....	869.5
4th st. N.....	15th av.....	16th av.....	6	31	1883	.....	384.3
4th st. N.....	16th av.....	20th av.....	6	252	1887	1886	1,432.
4th st. N.....	20th av.....	21st av.....	6	360	1887	1887	369.1
4th st. N. E.....	Central av.....	4th av.....	6	90	1885	1884	1,727.5
4th st. N. E.....	4th av.....	6th av.....	6	191	1886	1885	838.2
4th st. N. E.....	6th av.....	Broadway st.....	6	318	1887	1886	1,600.8
4th st. S.....	Hennepin av.....	Nicollet av.....	8	479	1888	1889	475.8
4th st. S.....	Nicollet av.....	2d av.....	8	46	1884	1883	879.4

*Prior to 1881.

Table No. 22—Continued.

STREET.	FROM—	TO—	Size— inches.	Extension No.	Year laid.	Taxes of	Length— feet.
4th st. S.	2d av.	6th av.	6		*1881		1,612.0
4th st. S.	6th av.	11th av.	12	427	1889	1888	2,045.8
4th st. S.	11th av.	Cedar av.	16	361	1888	1887	2,300.7
4th st. S.	Cedar av.	25th av.	6	188	1886	1885	1,632.9
4th st. S. E.	Central av.	14th av. S. E.	8		*1881		5,782.5
4th st. S. E.	16th av.	Oak st.	12	51	1884	1883	1,742.
5th av. S.	Pumphouse.	2d st.	16		*1881		418.
5th av. S.	Pumphouse.	Wash. av.	16	78	1884		795.1
5th av. S.	Pumphouse.	3d st.	24	64	1884		1,221.
5th av. S.	Pumphouse.	9th st.	24	67	1884		3,849.
5th av. S.	9th st.	19th st.	24	310	1887		3,081.2
5th av. S.	19th st.	24th st.	12	156	1886	1885	1,699.6
5th av. S. E.	4th st.	5th st.	6		*1881		389.
5th av. S. E.	7th st.	Division st.	6	11	1882		1,325.
5th st. N.	4th av.	11th av.	6	36	1884		2,894.
5th st. S.	Hennepin av.	Nicollet av.	6	194	1885	1885	582.7
5th st. S.	Nicollet av.	2d av.	8	47	1884	1883	846.
5th st. S.	2d av.	3d av.	8	366	1888	1887	348.9
5th st. S.	6th av.	11th av.	6	33	1883		2,168.
5th st. S.	11th av.	Cedar av.	12		*1881		2,511.5
5th st. S.	Cedar av.	19th av.	12		*1881		404.
5th st. N.	19th av.	22d av.	6	43	1883	1884	1,349.3
5th st. N. E.	Central av.	4th av.	6		*1881		1,076.
5th st. N. E.	4th av.	Broadway st.	8	181	1886	1885	2,197.9
5th st. S. E.	Central av.	5th av.	12	242	1887	1886	1,864.1
5th st. S. E.	5th av.	8th av.	6		*1881		1,019.
5th st. S. E.	8th av.	14th av.	6	13	1882		2,751.
5th st. S. E.	14th av.	16th av.	12	495	1889	1889	828.2
14th av. S.	Wash'gton av.	Bluff st.	6	20	1882		1,351.
14th av. S.	8th st.	13th st.	6	112	1885	1884	1,064.5
14th av. S.	18th st.	Franklin av.	6	490	1889	1888	921.9
14th av. S.	26th st.	Lake st.	8	271	1887 1888	1886	298.3 2,463.3
14th av. S. E.	4th st.	University av.	8		*1881		481.
14th av. S. E.	4th st.	Como av.	12	435	1889	1888	2,220.3
14th st.	Willow st.	Spruce place.	6	205	1886	1885	228.9
14th st.	1st av. S.	3d av. S.	24	522	1889	1889	964.4
14th st.	Portland av.	11th av. S.	6	38	1883		1,788.3
15th av. N.	Wash'gton av.	1st st.	6	153	1886	1885	833.2
15th av. N.	Wash'gton av.	3d st.	6	362	1888	1887	333.1
15th av. S.	Wash'gton av.	4th st.	6	165	1886	1885	839.3
15th av. S.	4th st.	5th st.	6	3	1881		385.
15th av. S.	5th st.	8th st.	8	186	1886	1885	1,257.4
15th av. S.	8th st.	Franklin av.	8	87	1885	1884	1,781.5
15th av. S. E.	5th st.	8th st.	6	155	1886	1885	1,222.5
15th av. S. E.	8th st.	Como av.	6	365	1887 1888	1887	701.1 890.6
15th av. S. E.	Como av.	Talmadge av.	6	327	1887	1886	625.1
15th av. S. E.	Talmadge av.	Division st.	6	364	1888	1887	670.6
15th st.	Nicollet av.	Vine place.	6	57	1884	1883	376.7
15th st.	Vine place.	Spruce place.	6	127	1885	1885	390.5
15th st.	3d av. S.	5th av. S.	6	363	1888		950.3
15th st.	Portland av.	Park av.	6	135	1886	1885	659.5
Garfield av.	26th st.	27th st.	6	368	1887	1886	641.8
Girard av.	5th av. N.	6th av. N.	6	330	1887	1886	577.3
Girard av.	6th av. N.	8th av. N.	6	200	1886	1885	705.
Grand av.	Franklin av.	24th st.	6	297	1887	1886	1,280.
Grand av.	Lake st.	31st st.	6	369	1888	1887	621.8
Grant st.	Stevens av.	2d av. S.	6	37	1884		455.
Grant st.	2d av. S.	3d av. S.	12	160	1886	1885	310.3
Groveland av.	Hennepin av.	Hillside place	10	122	1886	1885	1,100.
Harmon place	11th st.	Maple st.	6	85	1884	1884	1,913.3
Harmon place	Maple st.	Hennepin av.	6	146	1885	1885	549.5
Harriet av.	Franklin av.	24th st.	6	298	1887	1886	1,275.3
Harriet av.	25th st.	33d st.	8	260	1887	1886	5,233.9
Harrison st.	Division st.	Broadway st.	24	239	1887 1888	1886	2,452.7 252.4
Harrison st.	Broadway st.	18½ av. N. E.	24	438	1889	1888	1,506.2
Harrison st.	18½ av. N. E.	25th av. N. E.	24	236	1888	1886	2,266.3
Hawth'rn av.	9th st. N.	12th st. N.	16	439 & 440	1888		1,115.9
Hawth'rn av.	12th st.	Lyndale av.	24	314	1887	1886	1,866.7
Hawth'rn av.	Lyndale av.	Bryant av.	6	24	1883		661.
Hennepin av.	River.	Spruce place.	8		*1881		5,997.
Hennepin av.	Spruce place.	Maple st.	8	111	1885	1884	733.9
Hennepin av.	Maple st.	Oak Grove st.	8	211	1886	1886	1,520.7
Hennepin av.	Oak Grove st.	Groveland av.	8	121	1886	1885	700.6

*Prior to 1881.

Table No. 22—Continued.

STREET.	FROM—	TO—	Size— lake.	Extension No.	Year laid.	Taxes of	Length— feet.
Hennepin av.	Groveland av.	33d st.	12	225	1887	1886	9,513.1
Hiawatha av.	24th st.	27th st.	8	530	1889	.....	2,140.7
Hiawatha av.	27th st.	Lake st.	8	276	1888	.....	2,180.6
Highland av.	Royalston av.	B. 4. O. Lake ad	6	18	1882	.....	1,120.
Highland av.	L 16, b 2, O. L. ad	Lyndale av.	6	74	1884	1884	475.3
Hillside av.	Groveland av.	Mt. Curve av.	10	123	1886	1885	422.5
Humboldt av.	5th av. N.	6th av. N.	16	312	1887	1886	597.2
Irving av.	Western av.	6th av. N.	6	311	1887	1886	1,256.8
Irving av.	8th av. N.	10th av. N.	6	371	1888	1887	295.
Irving av.	20th av. N.	21st av. N.	6	370	1888	1887	234.6
Island av.	Bridge st.	Al'y 119, b 2, Nic	I. 8	210	1886	1885	1,683.7
Jackson st.	3d av. N. E.	Broadway st.	8	53	1884	1883	1,754.3
Jefferson st.	Summer st.	13th av. N. E.	8	441	1889	1888	1,105.5
James av.	Western av.	5th av. N.	6	442	1889	1888	610.5
Jefferson st.	Broadway st.	17th av. N. E.	8	372	1888	1888	1,863.6
Kenwood bou.	Newton av.	Water tank	10	231	1886	.....	681.7
Kenwood bou.	W. ta'k M & S L	Lake of I. bou	10	331	1887	1886	3,076.
Knox av.	6th av. N.	8th av. N.	6	201	1886	1885	763.8
Knox av.	10th av. N.	12th av. N.	6	373	1888	1887	714.1
Knox av.	12th av. N.	Twd. Plym. av	6	443	1889	1889	295.
Lake st.	Hennepin av.	3d av. S.	12	168	1886	1885	6,550.2
Lake st.	Chicago av.	9th av. S.	12	283	1887	1886	345.7
Lake st.	27th av. S.	Hiawatha av.	12	275	1887	1886	1,382.7
Laurel av.	Hennepin av.	Lyndale av.	6	.....	*1881	.....	1,318.
Laurel av.	Lyndale av.	Colfax av.	6	375	1888	1887	959.7
Linden av.	12th st.	16th st.	6	19	1882	.....	1,060.
Linden av.	16th st.	Aldrich av.	6	226	1886 (1887)	1886	1,006.3
Lindley av.	19th st.	Ridgewood av	8	197	1886	1885	186.5
Lindley av.	Lake st.	32d st.	6	374	1888	1887	1,348.3
Logan av.	8th av. N.	Plymouth av.	6	376	1888	1887	1,925.4
Lyndale av.	Highland av.	20th av. N.	16	250	1887 (1888)	1886	5,897.7 120.8
Lyndale av.	20th av. N.	29th av. N.	16	444	1889	.....	3,743.2
Lyndale av.	Highland av.	Western av.	16	203	1886	1885	1,165.
Lyndale av.	Western av.	Hawthorn av	16	253	1887 (1888)	1886	1,374.6 285.2
Lyndale av.	Laurel av.	Hawthorn av.	24	446	1889	.....	369.3
Lyndale av.	Laurel av.	Erie av.	24	254	1887	1886	693.1
Lyndale av.	Erie av.	24th st.	24	445	1889	1888	4,717.
Lyndale av.	24th st.	27th st.	24	320	1887	1886	1,955.1
Lyndale av.	Lake st.	32d st.	8	263	1887	1886	1,264.8
Lyndale av.	27th st.	Lake st.	8	142	1886	1885	1,938.2
Madison st.	Broadway st.	Summer st.	6	204	1886	1885	661.9
Madison st.	Summer st.	4th av. N. E.	6	315	1887	1886	1,327.1
Madison st.	4th av. N. E.	3d av. N. E.	12	316	1887	1886	170.7
Main st. N. E.	Central av.	7th av.	6	377	1888	1887	3,178.8
Main st. N. E.	7th av.	Broadway st.	6	328	1887	1886	1,574.8
Main st. N. E.	Broadway st.	13th av.	8	119	1885	1884	825.6
Main st. N. E.	13th av.	18th av.	8	380	1888	1887	1,852.8
Main st. N. E.	2d av.	3d av.	8	5	1881	.....	360.
Marshall av.	4th st. S. E. St.	P. M. & M. R. R.	12	381	1888	1887	2,416.9
Marshall st.	13th st. N. E.	15th av. N. E.	6	185	1886	1885	1,087.2
Marshall st.	15th av. N. E.	22d av. N. E.	6	379	1888	1887	2,836.6
Min'haha av.	Cedar av.	26th st.	12	21	1882	.....	4,009.
Monroe st.	Broadway st.	Summer st.	6	378	1888	.....	662.8
Monroe st.	Broadway st.	18½ av. N. E.	8	234	1887	.....	2,904.8
Morgan av.	Western av.	4th av. N.	6	180	1886	.....	257.
Mt. Curve av.	Hillside Place	Humboldt av.	10	124	1886	.....	1,891.6
Mt. Curve av.	Humboldt av.	Western av.	10	139	1886	.....	1,794.
Nicollet av.	1st st.	14th st.	6	.....	*1881	.....	6,189.5
Nicollet av.	14th st.	W. 19th st.	6	22	1883	.....	1,762.
Nicollet av.	W. 19th st.	24th st.	6	108	1885	.....	1,831.4
Nicollet av.	24th st.	Lake st.	6	60	1884	.....	4,034.7
Nicollet av.	Lake st.	32d st.	8	229	1886	.....	1,324.3
Nicollet Isl'd.	West bank.	East bank.	16	.....	*1881	.....	846.
Nicollet Isl'd.	East bank.	River.	8	.....	*1881	.....	104.
Nicollet Isl'd.	East bank.	River.	12	.....	*1881	.....	120.
9th av. S.	14th st.	Franklin av.	8	300	1887	.....	2,276.1
9th av. S.	Franklin av.	22d st.	6	382	1888	.....	619.7
9th av. S.	24th st.	25th st.	6	415	1888	.....	611.2
9th av. S.	28th st.	Lake st.	6	383	1888	.....	1,226.1
9th av. S. E.	7th st.	10th st.	6	16	1882	.....	864.
9th av. S. E.	9th st.	Ac's St'p M & M	6	83	1884	.....	280.
9th st. N.	2d av.	Hawth'rn av.	16	455	1889	.....	770.8
9th st. S.	Hennepin av.	Nicollet av.	6	256	1887	.....	985.8

*Prior to 1881.

Table No. 22—Continued.

STREET.	FROM—	TO—	Size— inches.	Extension No.	Year laid.	Taxes of	Length— feet.
9th st. S.	Nicollet av.	2d av.	6	.....	*1881	.....	850.
9th st. S.	2d av.	6th av.	6	55	1884	.....	1,736.5
9th st. S.	11th av.	13th av.	6	384	1888	.....	586.7
9th st. S. E.	9th av.	10th av.	6	81	1884	.....	549.9
19th av. S.	5th st.	7th st.	6	157	1886	.....	845.1
19th av. S.	7th st.	8th st.	6	452	1889	.....	471.1
19th st.	Vine place.	Lindley av.	8	196	1886	.....	357.2
19th st.	15th av. S.	16th av. S.	6	385	1888	.....	613.9
Oak st.	4th st S. E.	Cambridge st.	12	192	1885	.....	1,311.2
Oak Grove st.	W. line of L. D. J. S. J.	Hennepin av.	6	44	1883 1884	.....	401.2 754.
Oak Grove st.	W. line of L. D. J. S. J.	Nicollet av.	6	23	1883	.....	1,724.
Oak Lake av.	6th av. N.	8th av. N.	6	456	1889	.....	718.
Park av.	10th st.	Franklin av.	6	97	1885	.....	2,636.
Park av.	Franklin av.	24th st.	6	75	1884	.....	1,289.9
Park av.	24th st.	26th st.	6	88	1885	.....	1,330.5
Park av.	26th st.	27th st.	6	130	1886	.....	650.2
Park av.	27th st.	Lake st.	6	321	1887	.....	1,956.2
Pleasant av.	24th st.	26th st.	8	458	1889	.....	1,303.3
Pleasant av.	26th st.	33d st.	8	259	1887	.....	4,518.1
Plymouth av.	River.	1st st.	6	.....	*1881	.....	416.
Plymouth av.	1st st.	2d st.	8	.....	*1881	.....	438.7
Plymouth av.	2d st.	4th st.	16	481	1889	1889	1,130.3
Plymouth av.	4th st.	6th st. N.	10	114	1885	.....	665.8
Plymouth av.	6th st. N.	Lyndale av.	8	457	1889	1888	332.8
Portland av.	10th st.	22d st.	12	15	1882	.....	3,550.0
Portland av.	22d st.	24th st.	12	25	1883	.....	548.0
Portland av.	24th st.	27th st.	12	58	1884	.....	2,022.0
Portland av.	27th st.	Lake st.	12	289	1887	.....	1,942.6
Portland av.	Lake st.	33d st.	8	290	1887	.....	1,912.0
Prospect st.	Cambridge st.	Delaware st.	6	342	1887	.....	590.7
Queen av.	Kenwo'd boul.	21st st.	6	386	1888	.....	834.1
Ridgewood av.	Lindley av.	Landale av.	8	198	1886	.....	1,810.0
River—Subm'	rg'd pipe acr's	east channel.	16	.....	*1881	.....	250.0
River—Subm'	rg'd pipe acr's	west channel.	16	.....	*1881	.....	700.0
River—Subm'	rg'd pipe acr's	20th av. N.	24	209	1886	.....	862.7
Riverside av.	21st av. S.	25th av. S.	16	150	1886	.....	1,941.8
Royalston av.	Western av.	L 16 B O L'ke.	6	.....	*1881	.....	2,727.4
Sheridan av.	Kenwo'd boul.	21st st.	6	464	1889	1888	1,535.9
Sibley st.	8th av. N. E.	11th av. N. E.	8	183	1886	.....	1,190.5
Sibley st.	11th av. N. E.	13th av. N. E.	8	317	1886	.....	796.3
Spring st.	Harrison st.	Pierce st.	8	237	1887 1888	.....	493.5 1,160.7
Spruce place.	14th st.	15th st.	6	206	1885	.....	401.8
State st.	Cambridge st.	Beacon st.	6	387	1888	.....	368.1
Stevens av.	Grant st.	16th st.	6	37	1888	.....	744.0
Stevens av.	16th st.	17th st.	6	339	1886	.....	342.0
Stevens av.	17th st.	378' N of 24th st	6	257	1887	.....	2,224.8
Stevens av.	378' N of 24th st	24th st.	6	70	1884	.....	378.3
Stevens av.	24th st.	25th st.	6	129	1885	.....	710.6
Stevens av.	25th st.	33d st.	6	189	1886	.....	5,086.1
2d av. N.	2d st.	Wash'gton av	16	145	1886	1885	437.7
2d av. N.	Wash'gton av	9th st.	16	466	1889	1888	2,191.0
2d av. S.	1st st.	2d st.	6	.....	*1881	.....	4,863.
2d av. S.	Wash'gton av	Grant st.	6	.....	*1881	.....	.....
2d av. S.	Grant st.	16th st.	6	159	1886	1885	996.4
2d av. S.	16th st.	17th st.	6	228	1886	1886	345.8
2d av. S.	17th st.	18th st.	6	325	1887	1886	388.0
2d av. S.	Franklin av.	22d st.	6	128	1885	1885	612.5
2d av. S.	25th st.	26th st.	6	462	1889	1888	662.3
2d av. S.	26th st.	27th st.	6	320	1887	1886	643.0
2d av. S.	27th st.	28th st.	6	388	1888	1887	612.7
2d av. S.	Lake st.	33d st.	6	389	1888	1887	1,843.0
2d st. N.	Hennepin av.	3d av.	6	2	1881	1880	1,279.5
2d st. N.	Plymouth av.	20th av.	16	161	1886	1885	2,509.1
2d st. N.	20th av.	24th av.	36 & 24	417	1888	.....	1,565.7 & 81.5
2d st. N.	24th av.	41st av.	36	412	1888	1888	10,538.8
2d st. N. E.	Central av.	4th av.	8	319	1887	1886	1,751.5
2d st. N. E.	4th av.	Broadway st.	8	390	1888	1887	2,815.
2d st. S.	Nicollet av.	2d av.	6	69	1884	1884	822.
2d st. S.	2d av.	5th av.	6	.....	*1881	.....	1,180.
2d st. S.	5th av.	11th av.	16	.....	*1881	.....	2,478.
2d st. S. E.	Central av.	Bank st.	6	8	1881	1880	509.5
6th av. N.	Wash. av.	4th st.	8	.....	*1881	.....	841.
6th av. N.	4th st.	Lyndale av.	6	32	1883	.....	2,674.

*Prior to 1881.

Table No. 22—Continued.

STREET.	FROM—	TO—	Size— inches.	Extension No.	Year laid.	Taxes of	Length— feet.
6th av. N.....	Lyndale av.	Aldrich av.	6	103	1884	1884	463.2
6th av. N.....	Aldrich av.	Emerson av.	6	125	1885	1885	1,194.8
6th av. N.....	Emerson av.	James av.	6	199	1886	1885	1,644.2
6th av. N. E.....	Marshall st.	University av.	6	186	1886	1885	1,224.3
6th av. S.....	1st st.	10th st.	12	.....	*1881	.....	4,093.
6th st. N.....	Hennepin av.	1st av.	6	306	1887	1886	417.1
6th st. N.....	11th av.	Plymouth av.	6	36	1884	.....	1,429.
6th st. N.....	Plymouth av.	16th av. N.	6	397	1888	1888	1,193.4
6th st. S.....	Hennepin av.	Nicollet av.	6	181	1886	1885	671.2
6th st. S.....	½ way bet. Nic.	and 2d av.	10	48	1884	1883	629.
6th st. S.....	Nicollet av.	½ way to 1st av.	10	39	1883	.....	207.
6th st. S.....	2d av.	3d av.	10	109	1885	1884	374.8
6th st. S.....	3d av.	6th av.	12	89	1885	1884	1,220.8
6th st. S.....	6th av.	11th av.	12	287	1887	1886	2,103.4
6th st. S.....	11th av.	Cedar av.	12	193	1886	1885	2,769.7
6th st. S. E.....	Central av.	10th av.	6	91	1885	1884	3,839.5
6th st. S. E.....	10th av.	15th av.	6	280	1887	1886	1,992.
6th st. S. E.....	15th av.	16th av.	6	461	1888	1888	399.4
7th av. N.....	Wash. av.	4th st.	6	393	1888	1887	852.4
7th av. N.....	5th st.	Bradford av.	6	308	1887	1886	842.6
7th av. S.....	Wash. av.	3d st.	6	34	1883	.....	462.5
7th av. S.....	6th st.	7th st.	6	41	1883	1883	371.4
7th av. S.....	7th st.	10th st.	6	27	1883	.....	1,223.
7th av. S. E.....	5th st.	8th st.	6	187	1885	1885	1,207.4
7th st. S.....	Hennepin av.	Nicollet av.	8	.....	*1881	.....	775.
7th st. S.....	Nicollet av.	2d av.	8	45	1884	.....	846.
7th st. S.....	2d av.	10th av.	8	.....	*1881	.....	3,262.
7th st. S.....	10th av.	11th av.	8	1	1881	.....	420.
7th st. S.....	11th av.	13th av.	8	391	1888	1887	825.7
7th st. S.....	13th av.	14th av.	8	299	1887	1886	400.5
7th st. S.....	14th av.	15th av.	8	392	1888	1887	419.9
7th st. S.....	20th av.	21st av.	6	277	1887	1886	399.4
7th st. S. E.....	Central av.	10th av.	6	7	1881	.....	3,858.
7th st. S. E.....	10th av.	16th av.	6	246	1886	1886	2,511.6
16th av. N.....	4th st.	Lyndale av.	6	30	1883	.....	937.5
16th av. N.....	Lyndale av.	Dupont av.	6	93	1885	1884	1,220.2
16th av. N.....	Dupont av.	Emerson av.	6	177	1886	1885	432.5
16th av. S.....	8th st.	Franklin av.	6	.....	*1881	.....	1,467.
16th av. S.....	Franklin av.	22d st.	6	294	1887	1886	616.1
16th av. S. E.....	University av.	4th st.	6	50	1884	1883	436.2
16th av. S. E.....	4th st.	5th st.	12	496	1889	1889	382.
16th av. S. E.....	Como av.	Talmadge av.	6	394	1888	1887	622.6
17th av. S.....	Franklin av.	28th st.	8	272	1887	1886	3,893.2
17th st.....	Portland av.	Park av.	6	396	1888	1887	659.1
17th st.....	Park av.	Chicago av.	6	80	1884	1884	676.3
Thomas Place	Elwood av.	Logan av.	6	336	1887	1886	526.
Tuttle st.....	Como av.	Talmadge av.	6	398	1888	1887	621.2
2½ st. S.....	Cedar av.	20th av.	6	140	1886	1885	809.
3d av. N.....	1st st.	2d st.	6	.....	*1881	.....	420.3
3d av. N.....	2d st.	Wash. av.	6	425	1889	.....	439.7
3d av. N.....	Wash. av.	5th st.	6	220	1887	1886	1,245.1
3d av. N.....	5th st.	6th st.	6	230	1886	1886	402.
3d av. N. E.....	5th st.	Harrison st.	8	238	1887	1886	2,404.6
3d av. S.....	3d st.	10th st.	24	66	1884	1884	2,863.9
3d av. S.....	10th st.	Franklin av.	24	117	1885	1884	3,676.8
3d av. S.....	Franklin av.	Lake st.	24	133	1885	1885	5,252.6
3d av. S.....	Lake st.	33d st.	24	264	1887	1886	1,914.9
3d av. S.....	33d st.	38th st.	24	401	1888	1887	3,298.1
3d av. S. E.....	Main st.	4th st.	24	68	1884	1884	1,176.8
3d av. S. E.....	4th st.	Division st.	24	241	1887	1886	2,027.
3d st. N.....	Hennepin av.	3d av.	16	113	1885	1884	1,204.4
3d st. N.....	3d av.	6th av.	16	126	1885	1885	1,247.5
3d st. N.....	6th st.	Plymouth av.	16	472	1889	1888	2,844.3
3d st. S.....	Pump house.	Hennepin av.	16	17	1882	.....	3,487.
3d st. S.....	Nicollet av.	No. 2 Hose hs.	4	.....	*1881	.....	244.
3d st. S.....	3d av.	5th av.	24	65	1884	1884	806.2
3d st. S.....	6th av.	11th av.	6	216	1887	1886	2,057.5
3d st. S.....	11th av.	Cedar av.	6	400	1888	1887	2,053.7
10th av. S.....	River	2d st.	6	170	1886	1884	537.3
10th av. S.....	14th st.	Franklin av.	6	322	1886	1886	2,236.8
10th st. N.....	Hennepin av.	1st av.	6	.....	*1881	.....	823.
10th st. S.....	Hennepin av.	6th av.	8	.....	*1881	.....	3,556.
10th st. S.....	6th av.	Chicago av.	12	116	1885	1884	1,064.4
12th av. N.....	Emerson av.	Girard av.	6	484	1889	1889	753.3

*Prior to 1881.

Table No. 22—Continued.

STREET.	FROM—	TO—	Size— inches.	Extension No.	Year laid.	Taxes of	Length— feet
12th av. S.	24th st.	26th st.	8	270	1887	1886	1,360.7
12th st. N.	Hawth'rn av.	Linden av.	6	19	1882		100.
12th st. N.	Linden av.	Chestnut av.	6	162	1886	1885	351.1
12th st.	Hawth'rn av.	1st av. S.	24	473	1889	1888	2,340.1
12th st. S.	2d av.	Clinton av.	6	408	1888	1887	697.3
13th av. N. E.	River	Marshall st.	24	208	1886	1885	1,008.1
13th av. N. E.	Marshall st.	Main st.	16	190	1886	1885	669.9
13th av. N. E.	Jefferson st.	Monroe st.	6	403	1888	1887	638.5
13th av. S.	Wash. av.	Franklin av.	8	167	1886	1885	4,665.8
13th av. S. E.	University av.	4th st.	6	492	1889	1889	413.1
13th av. S. E.	6th st.	7th st.	6	303	1887	1886	439.
13th av. S. E.	Como av.	Division st.	6	244	1887	1886	1,304.
13th st. S.	1st av.	2d av.	12	487	1889	1889	630.9
20th av. N.	River.	Pt. E. of 1st st.	24	207	1886	1885	183.
20th av. N.	Pt. E. of 1st st.	2d st.	24	418	1888		635.
20th av. N.	2d st.	Wash. av.	16	175	1886	85	410.
20th av. N.	Wash. av.	James av.	8	99	1885	84	4,949.5
20th av. S.	Wash. av.	21st av.	6	409	1888		1,149.3
20th av. S.	5th st.	Franklin av.	6	173	1886	1885	2,323.5
21st av. S.	5th st.	Riverside av.	6	147	1886	1885	234.1
22d av. S.	Riverside av.	Franklin av.	8	222	1887	1886	1,777.5
W. 22d st.	Kenwood bou.	Sheridan av.	6	407	1889	1888	607.2
E. 22d st.	25th av. S.	27th av. S.	6	486	1889	1889	892.3
E. 24th st.	Nicollet av.	4th av. S.	6	61	1884	1883	2,007.
E. 24th st.	4th av. S.	Portland av.	6	29	1884	1883	665.
E. 24th st.	Portland av.	Cedar av.	8	267	1887	1886	4,941.2
W. 24th st.	Pleasant av.	Grand av.	6	476	1889	89	401.5
E. 24th st.	Cedar av.	Hiawatha	8	537	1889	1889	327.2
W. 24th st.	Hennepin av.	Fremont av.	6	404	1888	1887	421.1
W. 24th st.	Fremont av.	Irving av.	6	474	1889	1888	357.7
25th av. S.	Riverside	Franklin av.	6	151	1886	1885	1,060.2
25th av. S.	Franklin av.	22d st.	6	485	1889	1889	1,017.8
25th st.	Nicollet av.	Portland av.	6	92	1885	1884	691.5
25th st.	Minneh'ha av.	29th av. S.	8	137	1886	1885	2,638.5
26th av. N.	2d st.	Wash'gton av.	12	416	1888	1888	2,725.9
26th av. N.	Wash'gton av.	Lyndale av.	12	471	1889	1888	407.0
26th st.	12th av.	Cedar av.	12	268	1887	1886	1,603.8
27th av. S.	25th st.	Lake st.	8	274	1887	1886	2,639.3
W. 27th st.	Hennepin av.	Dupont av.	12	258	1887	1886	3,254.3
W. 27th st.	Dupont av.	Nicollet av.	12	143	1886	1885	1,203.4
E. 27th st.	Nicollet av.	Portland av.	12	110	1885	1884	3,925.7
E. 28th st.	Chicago av.	Bloom'g'tn av.	8	269	1888	1886	2,669.0
E. 31st st.	3d av. S.	Clinton av.	6	281	1887	1886	2,622.2
W. 32d st.	Blaisdell av.	Pleasant av.	6	292	1887	1886	332.7
E. 33d st.	3d av. S.	Portland av.	12	265	1887	1886	859.1
University av.	Central av.	6th av. N. E.	12		*1881		1,326.0
University av.	6th av.	Broadway st.	12	10	1882	1881	2,549.0
University av.	Central av.	3d av. S. E.	12	100	1885	1884	1,731.0
University av.	3d av. S. E.	5th av. S. E.	6		*1881	1881	1,459.9
University av.	5th av. S. E.	13th av. S. E.	6	12	1882	1881	869.0
University av.	14th av. S. E.	16th av. S. E.	6	54	1884	1883	3,413.0
Van Buren st.	Broadway st.	12th av. N. E.	6	63	1884	1883	847.6
Vine place.	Oak Grove st.	19th st.	6	195	1886	1885	392.3
Vine place.	19th st.	Franklin av.	6	410	1888	1887	799.8
Wash. av. N.	Hennepin av.	4th av.	6		*1881		563.5
Wash. av. N.	N. acr'ss Bass	ett's cre'k b'dg	8	489	1889		1,535.0
Wash. av. N.	N. 4th av. ext	across creek.	10		*1881		494.7
Wash'tn av. N.	Plymouth av.	14th av.	8	79	1884	1884	2,872.3
Wash'tn av. N.	14th av.	20th av.	8	106	1885	1884	367.3
Wash'tn av. N.	20th av.	30th av.	8	286	1887	1886	2,247.2
Wash'tn av. S.	Hennepin av.	6th av.	12		*1881		4,194.8
Wash'tn av. S.	6th av.	11th av.	12	72	1884		2,740.0
Wash'tn av. S.	11th av.	Cedar av.	10		*1881		2,066.0
Wash'tn av. S.	Cedar av.	15th av. S.	6	96	1885	1884	1,820.0
Wash'tn av. S.	19th av.	21st av.	6	221	1887	1886	461.6
Western av.	1st av. N.	11th av.	6	104	1785	1884	752.8
Western av.	11th st. N.	12th st. N.	8		*1881		1,088.3
Western av.	12th st. N.	R. R. bridge.	8	98	1885	1884	360.0
Western av. 70'	east R. R. b'dg.	Morgan av.	8	179	1886	1885	384.5
Western av.	Morgan av.	Russell av.	8	411	1888	1887	5,657.1
Wilder st.	Bridge st. 342'	S of Bridge st.	8	224	1885	1887	1,672.5
Willow st.	Hannon place	14th st.	6	138	1886	1885	342.5
							1,387.4

*Prior to 1881.

Recapitulation.

Size.	Length—feet.
Four inches.....	634.
Six inches.....	308,281.9
Eight inches.....	199,907.4
Ten inches.....	15,534.7
Twelve inches.....	109,219.3
Sixteen inches.....	44,315.7
Twenty-four inches.....	52,368.4
Thirty-six inches.....	12,104.5
Total (140.6 miles).....	742,365.9

Table No. 23.**WATER MAINS LAID DURING SEASON OF 1889.**

The following named water mains were laid by the city by day work. The abutting property was assessed sixty-five (65) cents per front foot, regardless of the size of the main.

STREET.	FROM—	TO—	Size, inches.	Exten- sion No.	Yr. laid.	Year of taxes.	Length, feet.	Cost.
To Atlantic el	evator near..	Shingle creek.	6	460	1889	.....	148.5	\$283.36
Aldrich av....	27th st.....	28th st.....	6	482	1889	1889	612.2	521.91
Colfax av....	24th st.....	27th st.....	6	419	1889	1888	1,949.9	1,577.17
Clinton av....	27th st.....	48ft. S. of 28th st	6	483	1889	1889	716.7	616.92
8th st. S.....	5th av.....	6th av.....	12	422	1889	1888	380.9	709.34
8th st. S.....	7th av.....	11th av.....	12	423	1889	1888	1,644.	3,206.13
8th st. S.....	21st st.....	22d av.....	6	421	1889	1888	370.5	393.44
1st av. S.....	12th st.....	14th st.....	12	433	1889	1888	1,047.3	5,523.50
4th av. S.....	32d st.....	33d st.....	6	477	1889	1888	596.7	578.55
4th st. S.....	6th av.....	11th av.....	12	427	1889	1888	2,045.8	3,050.52
5th st. S. E.....	14th av.....	16th av.....	12	495	1889	1889	828.2	1,715.16
14th av. S.....	18th st.....	Franklin av.	6	430	1889	1888	921.9	811.22
14th av. S. E.....	4th st.....	Corno av.....	12	435	1889	1888	2,920.3	5,586.25
14th st.....	1st av. S.....	Stevens av.	8	428	1889	1888	313.	459.83
14th st.....	1st av. S.....	3d av. S.....	24	522	1889	1889	964.4	4,767.37
Harrison st.....	Broadway st.	18½ av. N. E.	24	438	1889	1888	1,506.2	8,944.37
Hawth'rn av.	9th st. N.....	12th st. N.....	16	439 & 440	1889	1888	1,115.9	3,204.25
Hiawatha av.	24th st.....	27th st.....	8	530	1889	1889	2,140.7	2,454.11
Jefferson st.....	Summer st.....	13th av. N. E.	8	441	1889	1888	1,105.5	1,321.53
James av.....	Western av.....	5th av. N.....	6	442	1889	1888	601.5	639.60
Knox av.....	12th av. N.....	to'rd Plym'th	6	443	1889	1889	295.	364.96
Lyndale av.....	Laurel av.....	Hawth'rn av.....	24	446	1889	1888	369.3	1,925.06
Lyndale av.....	Erie av.....	24th st.....	24	445	1889	1888	4,717.	21,049.92
Lyndale av.....	20th av. N.....	29th av. N.....	16	444	1889	1888 & '89	3,743.2	9,546.20
9th st. N.....	2d av.....	Hawth'rn av.....	16	445	1889	1888	770.8	2,021.47
19th av. S.....	7th st.....	8th st.....	6	452	1889	1888	471.1	426.64
Oak Lake av.....	6th av. N.....	8th av. N.....	6	456	1889	1888	718.	656.84
Pleasant av.....	24th st.....	26th st.....	8	458	1889	1888	1,303.3	1,491.44
Plymouth av.....	2d st.....	4th st.....	16	481	1889	1886	1,130.3	3,421.73
Sheridan av.....	Kenwood boulev	21st st.....	6	464	1889	1888	1,635.9	1,472.35
Plymouth av.....	6th st. N.....	Lyndale av.....	8	457	1889	1888	332.8	622.21
2d av. N.....	Wash. av.....	9th st.....	16	466	1889	1888	2,191.	5,611.63
2d av. S.....	25th st.....	26th st.....	6	462	1889	1888	662.3	509.62
16th av. S. E.....	4th st.....	5th st.....	12	496	1889	1889	382.	1,082.09
3d st. N.....	6th st.....	Plymouth av.....	16	472	1889	1888	2,844.3	7,532.70
3d av. N.....	2d st.....	Wash. av.....	6	425	1889	1888	439.7	795.61
12th st.....	Hawth'rn av.....	1st av. S.....	24	473	1889	1888	2,540.1	11,303.76
12th av. N.....	Emerson av.....	Girard av.....	6	484	1889	1889	733.3	797.52
13th av. S. E.....	University av	4th st.....	6	492	1889	1889	413.1	407.20
13th st. S.....	1st av.....	2d av.....	12	487	1889	1889	630.9	1,385.61
22d st.....	Kenwood boulev	Sheridan av.....	6	467	1889	1888	607.2	598.40
22d st.....	25th av. S.....	27th av. S.....	6	486	1889	1889	802.2	835.04
24th st.....	Pleasant av.....	Grand av.....	6	476	1889	1888	327.2	402.18
24th st.....	Fremont av.....	Irving av.....	6	474	1889	1888	1,060.2	960.47
24th st.....	Cedar av.....	Hiawatha av.....	8	557	1889	1889	421.1	502.81
25th av. S.....	Franklin av.....	22d st.....	6	485	1889	1889	691.5	611.34
26th av. N.....	Wash. av.....	Lyndale av.....	12	471	1889	1888	1,603.8	2,975.09
Wash. av.....	Across Basset	t's creek brid.	8	489	.....	.....	494.7	566.99
Total.....	.....	.....	.....	.....	.....	.....	54,071.5	\$126,331.41

Summary of Table No. 23.

Size, inches.	Length, ft.	Cost.
6.....	14,784.7	\$14,350.34
8.....	6,111.1	7,418.92
12.....	11,483.2	25,233.69
16.....	11,795.5	31,337.98
24.....	9,897.0	47,990.48
Totals (10.24 miles).....	54,071.5	\$126,331.41

Table No. 24.

WATER MAINS TO BE LAID IN THE YEAR 1890.

The assessment for the following named water mains was made in the same manner as explained at the head of Table No. 23.

STREET.	FROM—	TO—	Size, Inches.	Extension No.	Estimat'd length, ft.	Estimat'd cost.	Amount of assess- ment.
Aldrich av...	16th av. N....	20th av. N....	6	499	1,436	\$1,866.80	\$1,455.87
Aldrich av...	22d st....	27th st....	6	497	2,636	3,426.80	3,011.15
Aldrich av...	29th st....	31st st....	6	498	1,201	1,561.30	1,305.91
Bloom'g't'n av	Lake st....	32d st....	8	500	1,310	1,834.00	1,534.90
Chicago av...	Lake st....	34th st....	8	503	2,513	3,518.20	2,887.69
Chicago av...	34th st....	38th st....	12	559	2,676	5,218.20	3,051.43
Colfax av...	27th st....	28th st....	6	502	607	689.10	679.32
Colfax av...	Lake st....	32d st....	6	501	1,309	1,701.70	1,436.71
Division st...	13th av. S. E.	14th av. S. E.	12	504	330	643.50	316.58
Emerson av...	24th av. N.	27th av. N.	6	509	1,494	2,532.40	1,650.35
8th st. S.	25th av.	29th av.	6	508	1,628	2,116.40	1,046.29
8th st. S. E.	10th av.	14th av.	6	506	1,598	2,077.40	1,644.05
11th st. N.	Western av.	Holden st....	6	507	329	427.70	325.00
11th st. N.	Chestnut av.	Hennepin av.	6	505	608	790.40	463.45
11th st. S.	1st av.	3d av.	6	424	874	1,136.20	544.70
Fillmore st.	Broadway st.	Spring st....	6	514	1,276	1,658.80	1,101.36
Fremont av...	27th av. N.	32d av. N.	6	516	1,930	2,509.00	2,277.29
Fremont av...	27th st....	28th st....	6	517	614	798.20	691.82
1st av. S.	10th st....	12th st....	6	511	850	1,105.90	650.00
1st av. S.	33d st....	34th st....	6	510	648	842.40	765.05
4th av. S.	31st st....	32d st....	6	515	624	811.20	707.67
4th st. S. E.	15th av.	16th av.	6	512	410	533.00	350.35
5th av. S.	24th st....	27th st....	6	513	2,016	2,620.80	2,063.48
5th st. S.	3d av.	6th av.	8	429	1,260	1,764.00	661.05
14th av. S.	Franklin av.	26th st....	8	519	2,621	3,669.40	2,645.19
14th av. S. E.	Como av.	Division st.	12	520	1,322	2,577.90	1,394.14
15th av. S.	24th st....	26th st....	6	518	1,306	1,697.80	1,339.16
15th av. S. E.	Division st.	Winter st....	6	523	660	858.00	724.02
41st av. N.	Lyndale av...	2d st. N.	24	521	576	2,880.00	443.33
Garfield av...	24th st....	26th st....	6	524	1,314	1,708.20	1,544.28
Grand av...	26th st....	27th st....	6	527	640	832.00	705.70
Grant st.	Nicollet av...	1st av. S.	6	526	430	559.00	355.61
Groveland av	Clifton place.	Hennepin av...	6	525	408	530.40	378.90
Harriet av...	24th st....	25th st....	6	528	694	902.20	763.56
Harrison st.	14th av. N. E.	18½ av. N. E.	24	*438	1,390	9,345.63	1,580.47
Humboldt av.	33d st....	34th st....	6	529	584	759.20	698.10
Irving av...	34th st....	35th st....	6	531	629	817.70	777.40
James av...	5th av. N.	6th av. N.	6	532	634	824.20	668.07
Jefferson st...	17th av. N. E.	18th av. N. E.	8	533	530	742.00	511.67
Knox av...	Present term.	Plymouth av.	4	443	374	486.20	452.47
Lake st.	3d av. S.	Chicago av...	12	447	2,627	2,405.65	2,320.11
Lindley av...	26th st....	28th st....	6	534	1,254	1,636.20	1,404.55
Lyndale av...	29th av. N.	32d av. N.	16	535	1,421	32,968.55	8,934.91
Lyndale av...	32d av. N.	41st av. N.	24	536	5,869		
Morgan av...	10th av. N.	12th av. N.	6	494	627	815.10	765.67
Nicollet av...	32d st....	33d st....	6	539	670	938.00	797.81
9th av. S.	23d st....	24th st....	6	538	687	893.10	725.28
9th av. S.	25th st....	26th st....	6	453	643	835.90	748.19
19th st.	Ridgewood av	Lyndale av...	6	537	1,970	2,561.00	2,266.60
19th st.	3d av. S.	5th av. S.	24	544	994	4,473.00	622.70
Pleasant av.	Franklin av.	Ridgewood av.	6	540	401	521.30	283.56
Polk st.	22d av. N. E.	26th av. N. E.	6	541	1,821	2,367.30	2,049.29
Riverside av.	Cedar av...	21st av. S.	16	459	1,439	3,669.45	1,000.68
Russell av...	6th av. N.	10th av. N.	6	542	1,307	1,699.10	1,595.36
2d av. S.	E 28th st.	E Lake st.	6	545	1,328	1,726.40	1,325.32
6th av. N.	James av.	Russell av.	6	543	2,785	3,620.50	2,817.76
16th av. S. E.	Talmadge av.	Division st.	6	544	655	851.50	772.59
Tuttle st.	Talmadge av.	Division st.	6	550	655	851.50	772.59
10th av. N.	Logan av.	Morgan av.	6	493	326	423.80	275.29
10th av. S.	22d st....	24th st....	6	560	713	926.90	730.98
10th av. S.	24th st....	25th st....	6	556	610	793.00	691.60
10th av. S.	38th st....	39th st....	6	561	633	822.90	745.47
12th av. S. E.	Como av.	Division st.	6	549	1,281	1,665.30	1,444.30
13th av. S. E.	7th st....	8th st....	6	555	380	494.00	306.22
13th st.	Harmon place	Vine place.	6	488	814	1,058.20	886.60
22d av. N. E.	Harrison st.	Polk st....	16	554	467	1,190.85	411.78
24th st.	Garfield av.	Lyndale av...	6	552	338	439.40	239.72
25th st.	Park av...	Portland av.	6	547	661	859.30	526.02
27th av. N.	Emerson av.	Fremont av...	6	553	327	425.10	303.95
28th av. N.	Pacific st.	2d st....	6	546	794	1,032.20	858.00
W 33d st.	Hennepin av.	Humboldt av.	12	558	657	1,281.15	636.81
34th st.	Humboldt av.	Irving av...	6	551	329	427.70	308.23
38th st.	Chicago av...	10th av. S.	16	562	714	1,820.70	621.35
Univ'ty av S. E.	Oak st....	Malcolm st...	6	548	4,350	5,655.00	3,785.78
Wash'g'ton st.	5th st. N. E.	17th av. N. E.	12	475	3,828	7,464.60	4,017.12
Total.....					88,664	\$161,069.98	\$91,595.13

Summary of Table No. 24.

SIZE.	Estimat'd length— feet.	Estimated cost.	Amount of assessm't.
Six inches.....	55,450	\$72,575.20	\$57,205.41
Eight inches.....	8,904	12,465.60	9,038.31
Twelve inches.....	11,440	19,681.00	11,736.19
Sixteen inches.....	4,041	10,304.55	3,028.51
Twenty-four inches.....	8,829	46,043.63	10,586.71
Total (16.79 miles).....	88,664	\$161,069.98	\$91,595.13

Table No. 25.

STREET SPRINKLING FOR THE SEASON OF 1889.

This work is done by the wards, by day work, and the whole cost assessed to abutting property in advance.

WARD.	Aver. cost per front foot.	No. of front feet assessed.	Total cost.
First.....	6 85-100	48,948	\$3,336.00
Second.....	5 82-100	84,478	4,921.50
Third.....	3 94-100	128,743	5,093.30
Fourth.....	6 53-100	198,360	12,890.09
Fifth.....	5 47-100	236,382	12,938.08
Sixth.....	6 41-100	65,833	4,327.75
Seventh.....	7 50-100	15,160	1,139.00
Eighth.....	4 94-100	154,074	7,618.68
Ninth.....	5 60-100	29,869	1,674.00
Tenth.....	6 84-100	8,809	603.00
Eleventh.....	4 36-100	83,344	3,635.45
Twelfth*.....			
Thirteenth*.....			
Total (99.7 miles of streets exclusive of crossings.).....		1,053,000	\$58,176.85

*No sprinkling done.

Table No. 26.

STREET SPRINKLING ORDERED FOR THE SEASON OF 1890.

This work is to be done and is assessed in the same manner as for the season of 1889.

WARD.	RATE OF ASSESSMENT PER FRONT FOOT.		No. of fr'nt feet assessed.	Amount of assessm't.
	Not paved	Paved.		
First.....	.07½	.....	79,579	\$5,970.68
Second.....	.07	.....	95,197	*6,746.72
Third.....	.05	.07½	218,079	12,087.56
Fourth.....	.05	.08½	213,603	12,951.58
Fifth.....	.05½	.09	247,111	15,857.70
Sixth.....	.06	.09	91,118	5,617.80
Seventh.....	.07½	.....	69,593	5,212.62
Eighth.....	.06	.....	201,362	12,086.26
Ninth.....	.07½	.....	49,198	3,691.35
Tenth.....	.07½	.....	9,830	675.85
Eleventh.....	.05	.....	139,033	†9,019.07
Twelfth.....	.06	.....	2,305	138.32
Thirteenth.....	.06	.....	2,349	141.04
Total (134.3 miles streets, exclus. of crossings)	.06½	.....	1,418,357	\$90,195.56

*A few double assessments. †Several double assessments.

Table No. 27.

STREET SWEEPING FOR 1889.

The paved streets are swept at night, under the direction of the street commissioner.

WARD.	Cost.				No. of sq. yds. swept.
	Per. sq. yds. mills.	Repairs and oil.	Teams and men.	Total.	
Second.....	4.3	\$83.50	\$416.40	\$499.90	116,298
Fourth.....	9.7	396.50	1,019.00	1,415.50	146,633
Fifth.....	7.5	257.47	1,162.00	1,419.47	187,555
Total .....	.....	\$737.47	\$2,597.40	\$3,334.87	450,486

Table 28—Continued.

STREET.	FROM—	To—	NORTHWESTERN TELEPHONE EXCHANGE.				NATIONAL SUBWAY COMPANY, DORSET PIPE.				EDISON LIGHT AND POWER COMPANY.			
			Side of street.	No. of conduits.	No. of ducts.	Total length of conduit—feet.	Side of street.	No. of conduits.	No. of ducts.	Total length of conduit—feet.	Side of street.	No. of pipes—3 wires in each.	Total length of pipe—feet.	Total length of conduits—feet.
Nicollet av.	5th st.	6th st.	East	2	4	820	West	2	24	820	West	3	1,230	2,870
Nicollet av.	6th st.	7th st.	East	2	4	820	West	2	18	820	West	2	820	2,460
Nicollet av.	7th st.	8th st.	East	1	2	522	West	2	18	820	West	2	820	2,162
Nicollet av.	8th st.	9th st.					West	2	18	794	West	1	410	1,204
Nicollet av.	9th st.	10th st.									West	1	387	387
6th st. S.	Hennepin av.	Nicollet av.					North	2	12	1,846	North	1	614	1,846
6th st. S.	Hennepin av.	Nicollet av.												614
7th st.	Western av.	Nicollet av.	South	1	2	1,287	North	1	12	961				1,287
2d av. S.	Western av.	R. R.	East	1	2	198								961
2d av. S.	2d st towards Hennepin av.	4th st. S.									North	1	821	198
2d st. S.	Hennepin av.	1st av. S.												1,640
2d st. S.	Hennepin av.	3d av. S.	South	2	4	1,640					North	1	1,093	1,640
10th st. S.	Hennepin av.	Nicollet av.									North	1	1,093	1,666
Washington av. N.	1st av.	1st av.					East	2	18	1,666				1,666
Washington av. N.	1st av.	Hennepin av.					East	2	18	820	East	1	377	1,197
Washington av. N.	1st av.	Hennepin av.									West	1	410	410
Washington av. S.	Hennepin av.	Hennepin av.					East	2	21	620	West	1	209	829
Washington av. S.	Washington av. S.	Nicollet av.					East	2	21	1,642	East	2	1,642	3,284
Washington av. S.	Nicollet av.	2d av. S.					East	2	2	1,642	West	2	1,642	1,642
Washington av. S.	Nicollet av.	2d av. S.					East	2	2	820	East	1	410	1,230
Washington av. S.	2d av.	3d av.					East	2	18	820	West	2	820	820
Washington av. S.	2d av.	3d av.					East	2	18	820	West	2	820	1,640
Washington av. S.	3d av.	4th av.					East	2	18	4,926	West	2	820	1,640
Washington av. S.	4th av.	10th av.					East	2	12	4,420	East			4,926
Washington av. S.	10th av.	Cedar av.					East	2	12	4,420				4,420
Total	(16.1 miles)					12,188				39,685			33,179	85,052

The conduit used by the Telephone Exchange Company is made of vitrified clay pipe, is rectangular in form, and contains two ducts.

The conduit used by the National Subway Company is the Dorset pipe, made of an asphalt composition, is rectangular in form, and contains six to twelve ducts.

The Edison Light and Power Company uses a cast iron pipe containing three wires.

ANNUAL REPORT

OF THE

CITY ATTORNEY

OF THE

City of Minneapolis

For the Fiscal Year Ending December 31, 1889.

ROBERT D. RUSSELL, - Attorney.

MINNEAPOLIS :
HARRISON & SMITH, PRINTERS.
1890.

LEGAL DEPARTMENT.

ROBERT D. RUSSELL, - City Attorney.
ALBERT H. HALL, - First Assistant.
LYCURGUS A. DUNN, Second Assistant.
WILLIAM H. MORSE, - - - Clerk.
F. DEHARVEN, - Sidewalk Inspector.
 (Detailed from the Police Department.)

REPORT OF THE CITY ATTORNEY

FOR THE YEAR ENDING DECEMBER 31ST, 1889.

To the Honorable City Council of the City of Minneapolis:

GENTLEMEN—I herewith submit the following report of the legal department of the city for the year ending December 31st, 1889.

On assuming the position of city attorney, I found a large amount of business on hand which required immediate investigation and attention, that the interests of the city might not suffer. In making this investigation and getting hold of the pending litigation and other matters, I was kindly assisted by my predecessor, Hon. Seagrave Smith, making the task much easier than it would have been without his wise and helpful suggestions. As the city has developed and grown I find that the work in this department has increased in a steady general way as it has in all the other departments, corresponding to this development and growth. During the past year the work has been specially increased by an act of the last legislature making the department responsible for legal services to all the boards of the city excepting the Park board, and by another act of the legislature giving it charge of state as well as city cases in the municipal court. The first of these acts increases the detail work in the matter of consultations and opinions, and somewhat in caring for suits. The second, together with the passage by the city council early in the year of a new ordinance regulating the liquor traffic, and another relative to prostitutes, have more than doubled the work in the municipal court. In order that you may have a more thorough knowledge of the civil litigation of the year and of the contested business in the municipal court, I have prepared and attached hereto for your reference and convenience schedules which show this work somewhat in detail, as follows: Schedule A, civil actions pending January 1st, 1889, and finally disposed of during the year; Schedule B, civil actions pending January 1st, 1889, not yet finally disposed of; Schedule C, civil actions brought during the year 1889, and finally disposed of; Schedule D, civil actions brought during the year 1889, and still pending; Schedule E, cases brought in the municipal court for violations of city ordinances and State laws, where there was a contest, attorneys appearing for the defendants. Summarizing these schedules it will be seen that at the beginning of the year there were twenty-seven civil actions pending, four in the supreme court of the State of Minnesota, one in the United States circuit court, one in the United States supreme court, and twenty-one in the district court of Hennepin county. During the year there have been brought twenty-four civil actions in the district court, and one in the municipal court, making in all fifty-two cases requiring attention. Of these, twenty-five have been finally disposed of, in nineteen of which the city has been absolutely successful; two have been settled without trial, and four have been decided against the city. Twenty-six have been tried in the district court; from the decisions in ten of these appeals have been taken to the supreme court, making a total of fourteen pending in the supreme court during the year; nine of these have been tried, and five are still pending; in six of the nine the city has been successful; in three the decision of the lower court where the city was successful have been reversed; of these three one was again tried in the district court and finally disposed of by a verdict in favor of the city; in the other two the city was not actually unsuccessful; one was the case of the St. Anthony Falls Water Power Company, in which the lower court was sustained in its conclusion that the city was entitled to the supply of water from the pond adjoining its East side pumping station through a canal supplying that station equal to the quantity of water the pond would supply as it originally existed; the case was reversed to ascertain the amount of water, the court below holding that the pleadings did not make an issue

as to this fact. The case is still pending in the district court for determination on this point. The other case was a writ of *certiorari* sued out by the St. Paul, Minneapolis & Manitoba Railway Company, asking for a review of the decision of the district court in the matter of the award of damages to which that company claimed to be entitled for the opening of Thirty-first street Northeast, and involved the general question of what the city should pay railroad companies as damages when opening new streets across their right of way. The district court held that the company was entitled to the cost of erecting planking, cattle guards and sign posts. The supreme court on the appeal of the railway company decided that the city should only pay the cost of erecting and maintaining planking, and that this cost should be ascertained by commissioners, and the case is sent back with instructions that such commissioners be appointed, and the damage assessed in accordance with this decision. This settles the question long in controversy, and the decision is more valuable to the city than if the decision of the lower court had been in all respects affirmed. Both of these decisions were of great importance and value to the city.

What are known as the North side crossing cases have occupied a good deal of time during the year in an effort to reach a compromise which might secure the bridging of the tracks at Washington avenue, Third, Fourth, and Fifth streets, in a better manner than can be done by securing a favorable decision in the suits now pending in the Supreme Court of the United States, and at an earlier time. The St. Paul, Minneapolis and Manitoba Railway Company and the city have practically agreed on a satisfactory plan, but the Manitoba company and the Minneapolis & St. Louis company have so far been unsuccessful in the attempt to reach an agreement. Nothing is lost by these efforts to compromise, and they have been considered in the hope that there could be some gain. If there is not a compromise, the cases will be tried in the Supreme Court of the United States as soon as they are reached on the calendar of that court.

Of the four cases decided in the district court adverse to the city, two were injunction suits where on a preliminary hearing the city was temporarily enjoined, and in which it seemed unnecessary for the city to take further action. One of these, *Bradish vs. The City*, involved the question of the right of the council to divert ward funds from the purposes for which the charter provides they shall be held. The decision was a very full one, and determined, as I think, correctly, that the different funds of the city must be sacredly held for the purpose for which they were assessed, and cannot be diverted to other purposes. The decision is important in view of the continual controversies arising on the question.

Twenty of the fifty-two cases considered during the year were brought for alleged personal injuries, and claimed damages to the amount of \$116,404.00; of these fourteen have been tried involving \$54,154.00, and the city has been successful in all but two, which were tried together for the same injury and a verdict rendered against the city for \$500.00, which has been paid. In the same cases there had been a previous verdict for \$1,250.00 which had been set aside. This \$500.00 and costs is the only money claim of any kind recovered in the litigation against the city during the year. Three of these personal injury cases are now pending on appeal in the supreme court. Twenty-seven cases altogether are still pending against the city, four in the State supreme court, two in the United States Supreme Court, five in the United States Circuit Court, one in the municipal court, and the others in the district court of Hennepin county.

By reference to Schedule E you will see that 566 cases have been tried in the municipal court, involving a variety of offences against the city ordinances and the State laws. In 433 of these the parties have been found guilty, and in 133 not guilty. Three have been appealed to the supreme court, one of which was dismissed in that court and two reversed; of these two one was reversed on a technicality, and the other because the ordinance in controversy was not authorized by the charter. In six cases where the municipal court found the parties guilty the defendants were released on *habeas corpus* proceedings by the district court after commitment. The ruling of the district court was affirmed by the supreme court.

In addition to the work appearing in these schedules, twenty-seven street-

opening appeals have been disposed of, in all of which the right of the city to open the streets has been sustained. Ten street opening appeals are still pending in the district court. Ninety-five contracts and bonds for city work have been drawn, and one hundred and twenty-nine opinions on titles for street openings, school house sites, etc., given. Every meeting of the city council a large number of committee meetings, and the sessions of the board of equalization have been attended by myself or an assistant. Numerous opinions have been given as asked by the council, its committees, the city officers and others. Many of these were written and of considerable importance, notably one on the street railway franchise, one on the underground wire ordinance, and another on the right of the city to open Minnehaha avenue through the property of the Chicago, Milwaukee & St. Paul Railway Company. These opinions many times required a great amount of work in preparation, and took a large amount of time.

In the organization of this department I have endeavored to divide the labor so that the different branches of the work should be promptly and efficiently performed. I have myself kept a general supervision of all the work, have personally tried the civil actions, advised the council and its officers, have investigated and made reports on a large number of claims for damages of every kind and character presented to the council, and until September 1st, tried all street opening appeals. I have been peculiarly fortunate in having competent and faithful assistants, each of whom has contributed to the best of his skill to the success of the department and the interests of the city. Albert H. Hall, the first assistant, had entire charge of the municipal court business up to September 1st, 1889, trying all cases in that court and all appeals to the supreme court from that court. Since September 1st he has done work of a more general character, rendering aid in municipal court matters as it was necessary, and having charge of street opening appeals. During the year he has acted for me in my absence or inability to act in attending council and committee meetings, giving opinions, drawing ordinances, etc. In addition to this he has examined numerous abstracts of title, and assisted me in some civil cases. On September 1st, you very kindly gave me another assistant in the person of L. A. Dunn, who has since his appointment had charge of the municipal court business which has been large enough to occupy the greater part of his time. Wm. H. Morse, although nominally a clerk, has been practically an assistant, keeping all the records, drawing contracts and bonds, examining abstracts and much other important and valuable office work. I have continued the policy of my predecessor in having claims against the city carefully and thoroughly investigated as early as possible after presentment, thereby preventing jobs against the city and enabling us to settle worthy claims without the expense of litigation. To assist in this work, Mr. F. De Harven was detailed to this department from the police department several years ago, and he has continued to perform his duty in a thorough manner, saving the city from imposition and thereby saving it from a waste of money.

It will thus be seen that there has been an unusual amount of business in this department of the city's affairs. With a second assistant the work is still sufficient to keep everyone connected with the department very busy. No outside help has been employed however, and no money expended for services in this direction. The result of the work is as favorable as we could wish or expect, and speaks for itself.

In closing, I desire to thank you, gentlemen, for your uniform courtesy and constant assistance in all of the matters with which I have had to do. I have and do appreciate it, and will try while connected with you to render such services as may show my appreciation.

Respectfully submitted,

ROBERT D. RUSSELL,

City Attorney.

Schedule "A."

CIVIL CASES PENDING JANUARY 1, 1889, AND FINALLY DISPOSED OF DURING THE YEAR 1889.

No. 190. MATTHIAS FUNK vs. THE CITY.

Suit commenced August 20, 1884, to recover from the city an indebtedness due to one Ole Johnson, \$58.75, plaintiff having recovered judgment against Johnson and levied an execution on the amount due from the city. February 23, 1889, demurrer to the complaint argued and demurrer sustained.

No. 269. POTTNER & PLACHY vs. THE CITY.

Claim for \$362.00 damages for flooding cellar. June 11th, 1889, cause argued in supreme court on appeal of the plaintiffs from an order denying a motion for a new trial. June 18th, 1889, decision of the supreme court affirming order of court below. Judgment entered in favor of the city for \$41.50.

No. 311. ELMER A. HALL, BY HIS GUARDIAN *ad litem* vs. THE CITY.

Claim for \$5,000 for damages for personal injury received in a derrick. Tried in May, 1887, by a jury, resulting in a verdict for plaintiff for \$1,200. New trial granted. Tried again before a jury February 11, 1889, resulting in a verdict for plaintiff for \$300. Judgment entered on the verdict and judgment paid.

No. 312. CYRUS E. HALL vs. THE CITY.

Claim of \$5,000 damages from the same injury as the last above case. Tried with No. 311, and verdict against the city for \$200. Judgment entered on the verdict, and judgment paid.

No. 314. ELIZABETH M. GALLAGHER vs. THE CITY.

Claim of \$1,025 for personal injuries from alleged defective sidewalk. February 18, 1889, cause tried before the court and a jury. Dismissed on motion of defendant, after plaintiff rested. Judgment entered in favor of city for \$12.88 costs.

No. 321. MATHEW VILISKI vs. THE CITY.

Claim for \$2,469.78 for stone quarried from street opposite plaintiff's land. Tried by a jury June 1, 1888, resulting in a verdict for plaintiff of \$1,125. Appealed by defendant to the supreme court, and submitted prior to January 1, 1889. March 22, 1889, decision of supreme court reversing order of district court and determining for what damages plaintiff might recover. April 4, 1889, judgment entered in supreme court in favor of city for \$92.10 costs. May 24, 1889, judgment entered by agreement in the district court conforming to the ruling of the supreme court, for the sum of \$1,025.

No. 324. SAMUEL M. RICH vs. THE CITY.

Action for \$1,160 for quarrying stone out of the street adjacent to plaintiff's land. Argued in supreme court prior to January 1st, 1889, on appeal of plaintiff. February 12, 1889, decision of supreme court rendered affirming order of court below dismissing the action. Judgment entered in supreme court in favor of city for \$41.55 costs.

No. 331. ROBERT H. GRAHAM vs. THE CITY.

Action to enjoin the city and its officers from paying money borrowed for use of the 9th ward. December 22, 1888, order sustaining demurrer entered by district court. Appeal by plaintiff. May 7, 1889, the supreme court affirmed the order of the court below. Judgment in supreme court for \$39.25 costs.

No. 332. EDMUND KENT vs. THE CITY.

Claim for \$4,117 for personal injury from alleged defective sidewalk. April 24, 1889, cause tried and verdict ordered for the defendant. September 3, 1889, new trial granted. December 16, 1889, cause tried before the district court and a jury, resulting in a verdict for defendant.

No. 336. STATE OF MINNESOTA *ex. rel.* GEORGE D. PERKINS, vs. CITY COUNCIL OF THE CITY OF MINNEAPOLIS.

Writ of mandamus to compel the payment of \$6,000 and interest for damages for taking land for Plymouth avenue. Judgment entered in the district court in August, 1888, for the relator. May 7, 1889, argued and submitted in supreme court on appeal of the defendant from the judgment of the district court. Decision in supreme court in favor of city reversing the order of the district court. Judgment in favor of city for \$79.80 costs in the supreme court.

No. 338. EDWARD A. STEVENS vs. THE CITY.

Action for \$7,924 for services rendered in compiling charter and ordinances. Appeal to the supreme court by plaintiff from an order of the district court overruling motion for a new trial, entered March 20, 1889. November 19, 1889, cause argued and submitted in supreme court resulting in a decision affirming the order of the court below. Judgment entered in the supreme court in favor of the city for \$45 costs.

No. 339. STEPHEN HARDER vs. THE CITY.

Action for \$3,000 for personal injuries from alleged defective sidewalk. April 29, 1889, argued and submitted in supreme court on plaintiff's appeal from an order overruling a motion for a new trial, case having been dismissed by the district court on defendant's motion after plaintiff rested his case. Decision of supreme court reversing order of district court entered May 8, 1889. October 21, 1889, case again tried in district court resulting in a verdict for the defendant.

No. 340. ROSWELL P. RUSSELL vs. THE CITY AND OTHERS.

Action to restrain the city from paying claim to parties for work done in the 8th ward. July 5, 1889, judgment entered dissolving temporary injunction and dismissing the action.

No. 341. JOHN T. BLAISDELL vs. THE CITY AND OTHERS.

Same action as No. 340. July 5, 1889, judgment entered same as above.

No. 342. HENRY N. AVERY vs. THE CITY AND OTHERS.

Same as Nos. 340 and 341. Same judgment.

No. 346. JOHN T. LARSON vs. THE CITY.

Action for \$5,000 for personal injury from alleged defective sidewalk. Action commenced December 28, 1888. June 13, 1889, cause tried before the district court and a jury resulting in a verdict for the defendant.

Schedule "B."**CIVIL ACTIONS PENDING JANUARY 1, 1889, NOT YET FINALLY DETERMINED.****No. 278. STATE OF MINNESOTA *ex. rel.* CITY OF MINNEAPOLIS, RELATOR, vs. MINNEAPOLIS & ST. LOUIS RAILWAY CO., RESPONDENT.**

Application for writ of mandamus to compel the respondent to construct bridges over its tracks where they cross Washington avenue, Third, Fourth and Fifth streets. Pending in the Supreme Court of the United States on a writ of error sued out by the respondent after decision of the Supreme Court of the State of Minnesota in favor of the relator. Motion to dismiss writ of error submitted in April, 1889; motion denied. Now pending in the Supreme Court of the United States for trial.

No. 279. STATE OF MINNESOTA *ex. rel.* THE CITY OF MINNEAPOLIS, RELATOR, vs. ST. PAUL, MINNEAPOLIS & MANITOBA RY. CO., RESPONDENT.

Same action as No. 278. August 16, 1889, petition for a writ of error from United States Supreme Court to the District Court of Hennepin County. Action now pending for trial in the United States Supreme Court.

No. 323. ST. ANTHONY FALLS WATER POWER COMPANY vs. THE CITY.

Action to enjoin defendant from interfering with plaintiff's dams and other property on Hennepin Island, involving the city's right to water power to run the Eastside pumping station. March 7, 1889, decision and order for judgment by the district court ordering an injunction in favor of the city and against plaintiff, restraining plaintiff from cutting off the water supply to the East side station, but deciding that the amount of water to which it is entitled could not be determined in this action. March 21, 1889, motion by plaintiff for new trial argued and denied. Appeal by plaintiff to supreme court. Appeal argued and submitted June 28, 1889, and decision by the supreme court affirming the lower court in its ruling as to the right of the city to the use of the water, but reversing the lower court in its decision that the amount could not be determined in this action, and directing that this amount be fixed, and that plaintiff furnish the amount when determined to the city. Case pending in the district court for trial in accordance with the direction of the supreme court.

No. 326. OREN LONGSTAFF vs. THE CITY *et al.*

Claim of \$1,500 for personal injuries from alleged defective street. Pending in the district court on a motion of plaintiff for a new trial, verdict having been rendered in favor of plaintiff for \$1.

No. 327. CHARLES O. BEDBURY vs. THE CITY *et al.*

Claim of \$1,500 for personal injury from alleged defective street. Pending in district court on a motion of plaintiff for a new trial, verdict having been rendered in favor of plaintiff for \$1.

No. 328. THOMAS W. EMERY vs. THE CITY *et al.*

Action for \$70 upon a judgment recovered against the city's employee which the plaintiff claims to have bought on execution sale. Cause pending in district court. Nothing done since answer filed March 13, 1888.

No. 330. ST. PAUL, MINNEAPOLIS & MANITOBA RY. CO. vs. THE CITY.

Action to restrain the city from using Como avenue where the same crosses plaintiff's tracks. October 12, 1889, cause argued and submitted in district court; taken under advisement; no decision rendered.

- No. 334. **ST. PAUL, MINNEAPOLIS & MANITOBA RY. CO. VS. THE CITY.**
Action to enjoin defendant from opening 22nd Avenue Northeast across plaintiff's tracks. September 26, 1889, cause tried and submitted in the district court; taken under advisement; no decision rendered.
- No. 337. **EVERETT BRUCE PRESTON VS. THE CITY.**
Action in the United States Circuit Court for infringement of a patent. Case being defended by the sureties on an indemnifying bond given the city.
- No. 344. **DAVID L. KEYES VS. THE CITY.**
Action of ejectment to recover a portion of land claimed by the city as a street. April 30, 1889, cause tried in the district court and judgment ordered for the plaintiff. Appeal by the defendant from an order of the court denying motion for a new trial. Set for argument in the supreme court January 15, 1890.
- No. 345. **JOHN BERGQUIST VS. THE CITY.**
Claim of \$10,862 for personal injury while working in a sewer. June 12, 1889, cause tried before the district court and a jury, and dismissed by the court on defendant's motion after plaintiff rested. Appeal by plaintiff to the supreme court from order of district court denying motion for a new trial. Cause set down for argument in supreme court January 27, 1890.

Schedule "C."

CIVIL ACTIONS BROUGHT DURING THE YEAR 1889 AND FINALLY DISPOSED OF.

- No. 352. **JOHN FITZGIBBON VS. THE CITY.**
Action in the district court to recover \$5,000 damages for alleged injuries received from falling into an excavation. Action commenced February 9, 1889. Dismissed by the court November 13, 1889, plaintiff failing to appear.
- No. 353. **JAMES FORRESTAL VS. THE CITY.**
Action in the district court to recover \$1,000, certified check deposited conditioned on the execution of a contract if awarded. On examination of the facts it appeared that the bid of plaintiff was withdrawn before the contract was awarded, and the check was therefore returned, and the action dismissed without costs.
- No. 361. **JAMES H. BRADISH VS. THE CITY AND CERTAIN OF ITS OFFICERS.**
Action in the district court commenced June 7, 1889, to restrain defendants from delivering a warrant and charging the amount thereof to the 9th ward street fund of the city, and crediting the same to the 1st ward street fund; the claim being that the city had no right to take from the 9th ward street fund, levied for work to be done in 1889, and pay an alleged indebtedness arising in 1887. August 3, 1889 demurrer to defendant's answer sustained.
- No. 364. **ALICE BARRY, AN INFANT, BY HER GUARDIAN *ad litem* VS. THE CITY.**
Action in the district court to recover \$2,000 damages for injury received by obstruction in the street. Commenced July 23, 1889; dismissed by plaintiff October 17, 1889, the day set for trial in the district court.
- No. 367. **E. J. H. ESTABROOKS VS. THE CITY.**
Action in the district court, commenced August 5, 1889, to recover possession of real estate claimed as a street. On investigation it appeared that the city had not properly condemned the premises, and plaintiff was allowed to take judgment without costs.
- No. 370. **F. W. SHONWALDER VS. THE CITY *et al.***
Action in the district court, commenced August 13, 1889, to recover \$1,050 damages alleged to have been caused by an obstruction in the street. December 10, 1889, cause tried before the court and a jury; verdict for the defendants.
- No. 371. **HARRY TUTTLE VS. THE CITY *et al.***
Action in the district court, commenced August 13, 1889, to recover \$1,025 damages alleged to have been received by reason of an obstruction in the street. December 11, 1889, cause tried before the court and a jury; verdict rendered for defendants.
- No. 372. **HARRY M. SULLIVAN VS. THE CITY *et al.***
Action in the district court, commenced August 13, 1889, to recover \$2,550 damages alleged to have been received by reason of an obstruction in the street. December 11, 1889, cause tried before the court and a jury; verdict rendered for defendants.
- No. 376. **HUGH WILSON AND EDNA M. SPRY VS. THE CITY *et al.***
Action in the district court, commenced September 25, 1889, to restrain defendants from executing a contract to pave Park avenue with asphalt. September 28, 1889, hearing on order to show cause; temporary injunction granted. The temporary injunction being granted practically ended the controversy, and no further steps were taken.

Schedule "D."

CIVIL ACTIONS BROUGHT DURING THE YEAR 1889, AND STILL PENDING.

No. 351. JAMES EDWARDS vs. THE CITY.

Action in the district court, commenced January 25, 1889, to recover \$500 caused by plaintiff's horse falling into a hole in the street. Cause at issue January 29, 1889. No further steps taken.

No. 354. EDWARD L. LARSON vs. THE CITY *et al.*

Action brought in the district court February 25, 1889, to recover \$5,000 damages for injuries alleged to have been caused by a wire rope suspended across a street. June 14, 1889, cause tried before the court and a jury, and a verdict rendered for defendants. Appeal taken by plaintiff to the supreme court, where action is now pending.

No. 356. CASTINA TIPPETT vs. THE CITY.

Action in the district court, commenced March 2, 1889, to recover \$5,500 damages for injuries alleged to have been sustained by reason of a defective sidewalk. Cause on calendar for trial.

No. 357. NICHOLAS HENKES vs. THE CITY.

Action in the district court, commenced March 2, 1889, to recover \$5,000 damages alleged to have been sustained by reason of a fall on an icy sidewalk. May 9, 1889, cause tried before the court and a jury, and dismissed on motion of defendant at the close of plaintiff's case. Appeal by plaintiff to supreme court, where case is now pending.

No. 363. ST. PAUL, MINNEAPOLIS & MANITOBA RY. CO. vs. THE CITY.

Action in the district court, commenced June 19, 1889, to enjoin defendant from opening 19th Avenue Northeast across plaintiff's tracks. September 26, 1889, cause tried before the court, and taken under advisement.

No. 365. CITY OF MINNEAPOLIS vs. MINNESOTA BRUSH ELECTRIC CO. *et al.*

Action in the district court to recover \$5,000 on bond given to indemnify the city from loss by reason of a contract made with the Electric company for lighting certain portions of the city. Commenced July 25, 1889, on the calendar for trial.

No. 366. C. W. CLARK vs. THE CITY.

Action in the United States Circuit Court, commenced July 9, 1889, to restrain the city from using a certain sewer machine, claiming an infringement on a prior patent. The city has a bond to indemnify it, and the bondsmen are taking care of the action.

No. 368. MARY J. HEMPERLY vs. THE CITY.

Action in the district court, commenced August 8, 1889, to recover \$10,350 damages for an alleged injury caused by a defective sidewalk. Case on calendar for trial.

No. 369. MOORE & Co. vs. THE CITY.

Action in the district court, commenced August 8, 1889, to recover \$151 and interest, money paid for license to carry on employment agency. Complaint demurred to, and, September 27, 1889, demurrer argued and sustained by the court. Appeal by plaintiff to supreme court.

No. 373. MARY COLLINS vs. THE CITY.

Action in the district court, commenced August 23, 1889, to recover \$5,000 for injuries alleged to have been caused by water-pipe projecting above the sidewalk. Case on calendar for trial.

No. 374. ANDREW C. LUND vs. THE CITY.

Action in the Circuit Court of the United States, commenced September 11, 1889, to recover \$25,000 damages for injuries alleged to have been received while plaintiff was working for the city in the construction of a sewer. Case on calendar, set for trial January 11, 1890.

No. 375. THE STATE OF MINNESOTA *ex. rel.* ST. PAUL, MINNEAPOLIS & MANITOBA RY. CO. vs. THE DISTRICT COURT.

Writ of certiorari, in the matter of opening 31st Avenue Northeast across the tracks of the Manitoba road. The district court held in the appeal from the award of the commissioners appointed by the city council, that the railroad company was entitled to the cost of constructing the planking, cattle guards and signs made necessary by the opening of the street. November 19, 1889, the cause was argued and submitted in the supreme court; and on December 26, 1889, a decision was rendered by the supreme court reversing the order of the court below, determining that the city was only liable for the cost of constructing and maintaining the planking; the railway company contending in the supreme court that the city must pay the cost of constructing and maintaining the planking, cattle guards and signs.

No. 377. MINNEAPOLIS SIDEWALK & PAVEMENT CO. vs. THE CITY *et al.*

Action in the district court, commenced September 28, 1889, for an injunction restraining the city from paying for curbing on Portland avenue under a contract with Augustus G. Parkhurst. The city is a nominal defendant. The action is on the court calendar for trial.

No. 378. MARIA OLSON VS. THE CITY.

Action commenced in the Circuit Court of the United States October 24, 1889, for \$5,000 damages for injuries alleged to have been received by reason of defective sidewalk. Case on calendar for trial.

No. 379. PETER PETERSON VS. THE CITY.

Action in the Circuit Court of the United States, commenced October 24, 1889, for \$20,000 damages by reason of an alleged injury received while working in a sewer. Case on calendar for trial.

No. 383. LUDWIG L. ANDERSON VS. THE CITY.

Action in the municipal court, commenced December 5, 1889, to recover \$420 for personal property taken from plaintiff while under arrest. Cause on calendar for trial.

Schedule "E."

**CASES TRIED IN MUNICIPAL COURT FOR VIOLATIONS OF CITY ORDINANCES AND STATE LAWS,
WHERE THERE WAS A CONTEST, ATTORNEYS APPEARING FOR THE DEFENDANTS.**

Disorderly Conduct.....	104
Drunkenness.....	30
Keeping houses of ill fame, being inmates of houses of ill fame, Prostitution and Fornication.....	54
Violation of liquor laws.....	64
Keeping gambling house, assault and battery, using abusive language. and others not classified.....	314
Total.....	566
Found Guilty.....	433
Found not guilty.....	133
	566
Appealed to supreme court.....	3
Dismissed in supreme court.....	1
Reversed in supreme court.....	2
Released on habeas corpus after commitment.....	6

ANNUAL REPORT

OF THE

CITY CLERK

OF THE

City of Minneapolis

For the Fiscal Year Ending December 31, 1889.

CHAS. F. HANEY, - City Clerk.

MINNEAPOLIS:
HARRISON & SMITH, PRINTERS.
1890.

CITY CLERK'S DEPARTMENT.

CHAS. F. HANEY, - City Clerk.
F. M. CLARK, - Assistant Clerk.

ANNUAL REPORT
OF
CHAS. F. HANEY, CITY CLERK

OF THE CITY OF MINNEAPOLIS, 1889.

CITY CLERK'S OFFICE,
MINNEAPOLIS, January 17, 1890. }

To the Honorable City Council, City of Minneapolis:

GENTLEMEN—I have the honor to submit herewith my annual report of fees and moneys received during the year 1889.

As there has been some misunderstanding as to the construction of the law governing the receipts of my office, I respectfully submit the following correspondence with Robert D. Russell, city attorney, relative to this matter:

When the bill passed by the legislature of 1889 became a law, the city clerk, by its terms was required to pay into the city treasury, fees and moneys, "allowed by public law." Believing that this was the only provision of the law that related to the office of city clerk, and in order to ascertain whether this provision applied to the ordinances of the city as well as to the general and special laws of the state, I addressed the following request to the city attorney:

"MINNEAPOLIS, April 25, 1889.

Robert D. Russell, City Attorney:

DEAR SIR—Will you please give me your opinion as city attorney, whether city ordinances are recognized in law as "public laws?"

Very respectfully, CHAS. F. HANEY, *City Clerk.*"

To the above request the following reply was received:

"Chas. F. Haney, Esq., City Clerk:

DEAR SIR—In reply to the question "Are the city ordinances recognized in law as public laws?" asked in your letter of April 25th, I have to say, that in the sense in which the term "public laws" are used, *ordinances are not public laws*. The general statutes of the state and the city charter by special enactment of the legislature are known as public laws in court, and need not be pleaded or proven, the court taking judicial notice of them. Ordinances must be pleaded and proven before the court will recognize them. This, however, is not altogether a proper definition of a public law. Public laws are those that affect the duty of the citizen to the state as distinguished from private laws which affect the duty of one citizen to another. In this sense ordinances passed under a power granted by the legislature for the preservation of public order may be valid public laws; but where it comes within the definition of a private law, that is the duty of one citizen to another, it would probably be termed a private law.

Very truly yours, ROBERT D. RUSSELL, *City Attorney.*"

In conformity with the law as thus interpreted and understood, I promptly reported monthly to the city council what fees and moneys I had received by public law and paid into the city treasury. After making my monthly report for December, 1889, an attempt was made to show that all the fees due the city under the new law had not been paid to the city treasurer. In order that an adjustment of the matter might be made that would be not only in strict compliance with the requirements of the law, but also satisfactory to the people who had supposed that *all* fees were being paid the city, instead of those accruing from "public law" only, I addressed the following request to the city attorney:

"MINNEAPOLIS, January 6, 1890.

Robert D. Russell, City Attorney:

DEAR SIR—In view of the difference of opinion relative to the exact disposition of the receipts of my office, I respectfully ask that you inform me of the proper construction of the law relating to the same. A recognition at your earliest convenience will oblige me, as I desire to effect a settlement with the city treasurer before submitting my annual report to the city council.

Respectfully,

CHAS. F. HANEY, *City Clerk.*"

His reply was as follows:

MINNEAPOLIS, January 8, 1890.

Chas. F. Haney, Esq., City Clerk:

MY DEAR SIR—In answer to yours of January 6, asking my opinion as to the law governing the receipts of your office, in order that you may make a proper settlement for the business of 1889, I have to say: The charter, as amended by the legislature of 1889, contains two provisions which I think relate to the receipts of your office. The first is an amendment to the last paragraph of section 3, chapter 3, and now reads as follows:

"The clerk shall have power to administer oaths and affirmations. He shall perform all other services by law required of clerks of cities or townships within said city. He (the clerk) shall receive a salary of \$3,100 per annum, and all clerk hire shall be paid by the city. He shall pay into the city treasury on the last day of each month, all fees and moneys allowed by public law and collected by him during that month, and shall hold his office for the term of two years, beginning with the day of his qualification as clerk."

This provision took the place of the following provision in the charter existing prior to 1889.

"The clerk shall have power to administer oaths and affirmations. He shall perform all other services by law required of clerks of cities, or townships within said city; but when services are required of him, by public law for which compensation is made from state or county treasury, such services shall not be regarded as services for said city, and he may retain such compensation in addition to the salary paid by such city."

The intention of this amendment was that all fees coming to your office by reason of any general law authorizing the payment of certain fees to clerks of cities, should be covered into the city treasury, and should not belong to the clerk individually as formerly. The second provision of the charter is the second paragraph of section 29, chapter 3, which reads as follows:

"All fees and emoluments of whatever character accruing to any city officer as such officer, shall be reported to the city council monthly, and paid into the city treasury."

This provision relates to all fees coming into your hands as clerk, by reason of any ordinance of the city, or any law by which fees are paid to you as clerk of the city, other than what is included in the section I have first quoted relating to fees coming to you by reason of general laws.

My construction of these two provisions is that all fees of every character coming to you by reason of your being city clerk should be accounted for by you and paid over to the treasurer; that is to say, all fees that would not come to you except for the fact that you are city clerk should be returned by you to the city.

Applying this construction to the items of receipts appearing on your books, you should account to the treasurer for all moneys received from certifying plats of additions to the city, from dog tax and dog tags, from issuing permits for the removal of buildings, which are commonly called "mayor's permits," under the ordinance entitled, "An ordinance concerning streets, side-walks, alleys, etc.," approved April 29, 1873, and as since amended, appearing on page 1003 of the published ordinances of said city; all fees received from issuing liquor licenses, for certifying copies of any papers in your office, for duplicate dog tags, for filing chattel mortgages, and for filing all certificates of births and deaths. Any moneys received by you for acknowledgments, or in connection with your notary public office, or for making statistics for mercantile agencies, belong to you individually, as they are not properly related to your office of city clerk.

Very truly yours,

ROBERT D. RUSSELL, *City Attorney.*

Complying strictly with the law as thus set forth, the following are the receipts and disbursements of the fees of my office for the eight months since the new law went into effect.

CHAS. F. HANEY TO CITY OF MINNEAPOLIS, DR.

To Filing chattel mortgages, contracts, bills of sale, etc., 11,083 at 10 cents.....	\$1,108.30
Filing satisfactions, 2,144 at 10 cents.....	214.40
Plumbers's licenses, 61 at \$2.....	122.00
Amount received from candidates for alderman in the eighth ward, special election (Australian law).....	15.00
Male dog licenses, 4,532 at \$1.....	4,532.00
Female dog licenses, 405 at \$2.....	810.00
Duplicate dog tags, 697 at 25 cents.....	174.25
Regular dog tags, 4,937 at 20 cents.....	987.40
Applications for liquor licenses, 303 at \$1.....	303.00
Charter and ordinances sold, 10 sets at \$3.....	30.00
Mayor's street permits, 169 at \$1.....	169.00
Certified copies, plats and certificates.....	179.00
Witness fees to produce records in court.....	5.45
	<hr/>
To recording births and deaths for eight months, \$3,477 at 25 cents (providing all returns are allowed).....	869.25
	<hr/>
Total.....	\$9,517.05
CR.	
By amount paid city treasurer June 5, 1889.....	\$4,725.40
“ “ July 16, 1889.....	670.50
“ “ August 2, 1889.....	342.00
“ “ September 4, 1889.....	283.20
“ “ October 4, 1889.....	224.60
“ “ November 8, 1889.....	232.50
“ “ December 5, 1889.....	155.80
“ “ December 31, 1889.....	165.70
Amount paid E. R. Williamson for dog tags.....	58.50
Amount paid for advertising liquor notices.....	44.35
Amount paid city treasurer January 17, 1890.....	1,745.25
	<hr/>
By amount due from the state for recording births and deaths as above, not yet received.....	869.25
	<hr/>
Total.....	\$9,517.05

Until the receipt of the last opinion of the city attorney, your clerk supposed that the provisions of the charter relative to “public law” was the only one that affected his office, and the amount of fees received by “public law” was all that was required to be paid into the city treasury. The other provision of the charter relating to “all fees and emoluments, etc.,” was never before applied to the office of city clerk, and all my predecessors retained such fees, though this has been in the charter for many years, and is not a new provision as some might think from the city attorney’s reference. In addition to the amount received by “public law” must now be added the amount received by “sundry ordinances” and “by virtue of the office.”

The amount received by sundry ordinances was given to be \$1,216.90, in which was unintentionally included \$30.00 received from the sale of charter and ordinances, thus reducing this amount to \$1,186.90. The amount received “by virtue of the office,” such as duplicate dog tags, certified copies, etc, is \$558.35, all of which is fully set forth in the above statement.

Respectfully submitted,

CHAS. F. HANEY, *City Clerk*.

ANNUAL REPORTS

OF THE

Registrar and Supervisor of Water Works.

OF THE

City of Minneapolis

For the Fiscal Year Ending December 31, 1889.

F. T. MOODY, - Registrar.

J. H. McCONNELL, - Supervisor.

MINNEAPOLIS:
HARRISON & SMITH, PRINTERS.
1890.

WATER WORKS DEPARTMENT.

REGISTRAR'S DIVISION.

F. T. MOODY, *Registrar*.
DAN. C. BROWN, *Cashier*.
E. R. RYAN, *Book-keeper*.
A. E. ALLEN, *Meter Inspector*.
J. J. JEFFERY, *Inspector*.
FRANK L. GOWEN, *Inspector*.

SUPERVISOR'S DIVISION.

J. H. McCONNELL, *Supervisor*.
E. C. PRATT, *Clerk*.
GEO. C. HOWSER, *Pipe Inspector*.
D. ROYAL, *Inspector*.

STREET SERVICE DIVISION.

WM. WINTHEISER, *Foreman*.

ENGINEERS.

ANDREW BERGSTROM, *Engr. North Side Pump House*.
FRANK X. HOLL, *Asst. Engr. North Side Pump House*.
THOMAS COWAN, *Engr. West Side Pump House*.
ED. LUNDEN, *Asst. Engr. West Side Pump House*.
M. V. BUSWELL, *Engr. East Side Pump House*.
WM. EGGLESTON, *Asst. Engr. East Side Pump House*.

ENGINEERING DEPARTMENT.

W. W. REDFIELD, *Asst. Engr. Water Works*.
G. BOGERT, *Draughtsman*.

WATER WORKS COMMITTEE OF CITY COUNCIL.

F. C. BARROWS, *Chairman*.
J. M. MELOY.
O. A. FULTZ.
G. H. WARREN.
THOMAS DOWNS.

ANNUAL REPORT
OF THE
REGISTRAR OF WATER WORKS.

MINNEAPOLIS, January 1, 1890.

To the Hon. City Council, City of Minneapolis:

GENTLEMEN—In accordance with your instructions, I again have the pleasure of submitting the annual report, together with a copy of the same, of the Registrar of Water Works for the year ending December 31, 1889.

During the year the work in my department has increased in all branches at the rate of thirty-three and one-third per cent. We have made 999 connections to the city mains, making a total number of taps in the city of 8,473; we have issued 1,046 extension permits, making a total of 5,396 in the city; during the year there has been made 3,860 house inspections by our inspectors. The department has collected for water taxes during the year \$157,514.22 being an average of \$13,126.19 per month. The general running expenses of the department has been \$62,631.31 or an average of \$5,219.27 per month as against \$5,586.07 per month for the previous year. This is very gratifying, in view of the increased amount of labor performed during the present year, also the fact that during two months of this period we have been running the North Side station, and pumping nearly all the city supply from that station with steam power, instead of water power as formerly.

The waste of water in this city is now very large, and is alarming in a monetary view, not that we have not supply enough, for we have, our pumping capacity being 73,000,000 gallons daily, with an average of about 13,000,000 gallons pumped per day, but in the fact that every gallon pumped now represents dollars and cents, as our total supply is pumped by steam from our new North Side station. It may be said, "why don't the proper city officers take steps to remedy this waste of water;" we will say that our laws, as they now exist, are not adequate, and are defective. Your committees on water works, under whose charge the department is now directly placed, are at this time considering suitable amendments to the existing ordinance, which with your co-operation and approval, it is hoped may become laws. With these proposed amendments we will be in a position to thoroughly control the water system of this city. It is not proposed to make laws which will be a burden on our citizens, but such laws as can be adjusted to meet all cases. I think I can truthfully say, that all officers of this department as well as every member of your honorable body are justly proud of our lawns, made so no doubt by the free use of city water; these we would not have otherwise, but when citizens will deliberately hang their hose in some convenient tree or remove the nozzle, and lay the hose on the ground to run at full head all day, and possibly all night, making a nuisance on the walks and in the gutters, there is where the line should be drawn. I find by a complete house inspection, that there is not more than one business block in seven, including the older buildings, and not including buildings recently erected, or buildings having water meters, but what they are running $\frac{1}{2}$ to 1 inch streams of water into the sewer at all times. The only remedy for this is for your honorable body to pass such laws as will provide adequate penalties for all places where the ordinance may be violated (including the city departments.)

There is a growing tendency among our citizens to use their city water through a water meter, but owing to the fact that our laws as now constituted require them to buy the meter and pay for the setting of the same, entailing an extra expense of about \$25.00, they hesitate.

I recommend that you pass an amendment to our ordinance providing: that the Registrar shall cause to be set a water meter on all business blocks, laundries, etc., at the cost of the city; this will pay in the diminished amount of water we will be required to pump.

I also recommend that any owner of property in which there is city water, can have a water meter set by the city (the same as the Gas company), the same as nearly every other city does where they have a city water supply. Of course there will be some expense attached to this plan, which I would provide for in a moderate rental for the meter, based on the life, cost and interest on the investment. I am sure that this is what a majority of water users desire, and is the only way to solve the equalization of rates and the great waste of water.

We have now in use in the city 372 water meters and elevator registers. Of this number 124 were set during the year; there are 26 hydraulic elevators with 4-inch connections. These elevators are not provided with meter connections, but have instead registers placed on some traveling part of the elevator. I am of the opinion that each elevator connection as they now exist should have a meter with a suitable pressure regulator attached. This would to some extent provide against the back ram on the mains and on all plumbing throughout the city. I have seen our pressure gauge in this office vary 150 pounds in one second. This I claim is almost entirely caused by the large connections being suddenly opened and as suddenly closed. It can be readily understood what effect this ram would have on almost any plumbing put in. A plumbing job may have originally been of the best, but it takes a very short time to start the best of it to leaking. Of course when this occurs it is laid at the door of the ever-abused plumber, whether justly or not in all cases I will leave to your honorable body to judge.

The practice of allowing large connections for hydraulic elevators has been stopped by your committee on water works. All elevators should be run by the "tank" system.

The labor performed in this department during the year has been done to the entire satisfaction of myself, and I think to the public, as we have not heard of any dissatisfaction. All records are in good shape, our accounts have been checked by the city comptroller by months and found correct as per his certificates. To the help of this office can be attributed the greater part of this most satisfactory showing. To them I desire to return my most sincere thanks, also to your committee on water works, who have in every way helped and presided over one of the most important departments in this city in the most satisfactory way to all.

I have prepared the following tables in my report in detail for the benefit of those who may desire it. I have also prepared the first table in totals for those who do not care for details.

Yours respectfully,

FRANK T. MOODY,

Registrar Water Works.

Table No. 1.

Showing Receipts, Disbursements, Bonded Debt, Rate of Interest and Balances of the Water Department for the year ending January 1, 1890.

<i>Receipts.</i>		
Balance January 1, 1889.....	\$79,558.42	
Water rents, penalties, etc.....	157,514.22	
Water main assessments.....	103,868.52	
Advances to lay mains.....	4,701.86	
Miscellaneous receipts.....	900.22	
Total actual receipts.....		\$346,543.24
Loan returned from permanent improvement fund.....	\$50,000.00	
Transfer from permanent improvement fund.....	50,000.00	
Error in pay rolls.....	71.73	
Amount not claimed on pay rolls.....	83.40	
Duplicate engineer's certificate.....	37.70	
Total transfers.....		100,192.83
Total transfers and receipts.....		\$446,736.07
<i>Disbursements.</i>		
New water mains.....	\$118,570.24	
General running expenses.....	62,631.31	
Water main annuallments.....	51,366.80	
North Minneapolis station.....	33,804.07	
Water main advancements.....	3,534.30	
Water meters.....	3,286.25	
Miscellaneous expenditures.....	6,201.51	
Total expenditures.....		\$279,394.48
Transfer to the permanent improvement fund (this does not represent any expenditure).....		100,000.00
Balance to credit water works fund January 1, 1890.....		67,341.59
		\$446,736.07
Bonded debt of the city on account of water works (average rate of interest, \$47 $\frac{1}{100}$ per cent.).....		\$1,235,000.00

Table No. 2.

Showing Comparison of Receipts for Water Rents, Penalties, etc., from 1872 to January 1, 1890, inclusive.

1872.....	\$2,406.82	1882.....	\$27,450.83
1873.....	2,795.00	1883.....	39,769.80
1874.....	3,421.96	1884.....	69,061.62
1875.....	4,685.27	1885.....	84,115.04
1876.....	3,029.95	1886.....	101,455.21
1877.....	6,521.16	1887.....	115,268.50
1878.....	10,225.75	1888.....	137,178.34
1879.....	12,402.94	1889, Ten months ending Jan. 1,	133,171.93
1880.....	15,926.05	1890.....	157,514.22
1881.....	20,818.51		

Table No. 3.

Showing in Detail Expenditures on Account of Pump House No. 1 Expense.

1889.		
Jany. 2.	Rent of 4 mill powers to January 1, 1889.....	\$1,000.00
	2 Barrels oil.....	18.90
	Fuse and caps.....	1.35
	Pay roll.....	71.73
	Material.....	37.64
	Coal.....	11.73
15.	Cylinder oil.....	45.45
	Caissons slides, stock, &c.....	75.00
	Gas, December 1888.....	39.42
	Hardware.....	5.50
	Gasoline.....	5.78
	1 Can cement.....	.30
29.	Blacksmithing.....	23.84
	Packing.....	8.45
	Wrenches and tongs.....	6.60
	Coal.....	344.04
	Gas January 1889.....	43.20
	Pay roll.....	983.30
	Telephone, January.....	3.00
	Pay roll.....	223.53
Feb'y. 11.	Paint, oil, &c.....	2.40
	Hardware.....	23.30
		7.13
	108lb Waste.....	58.80
	Telephone, February.....	3.00
26.	Gasoline.....	2.98
	Coal.....	318.25
	Pay roll.....	966.11

Mar.	12.	Gas, February.....	17.28
		Telephone, March.....	3.00
April	2.	Rent 4 mill powers to April 1.....	1,000.00
		1 Barrel Gasoline.....	5.78
		Coal.....	239.56
		Blacksmithing.....	12.55
		Telephone, April.....	3.00
		Pay roll.....	870.06
	30.	Soap and lye.....	4.15
		Caulking mud drum.....	1.35
		Gas, March.....	14.94
		Oil.....	1.00
		Pay roll.....	665.25
May	14.	Oil and can.....	3.50
		Emery cloth.....	.45
	28.	Pay roll.....	653.00
Jan.	4.	Ten packing.....	2.40
		Oil.....	9.36
		Material.....	2.26
	25.	2,500 register charts.....	7.50
		Brooms, etc.....	3.50
		Material.....	10.00
		Telephone, May.....	3.00
		Telephone, June.....	3.00
		Gas, April.....	17.82
		Gas, May.....	14.40
		Pay roll.....	632.66
July	2.	1 doz. lye.....	.90
		Rent, 4 mill powers to July.....	1,000.00
		Gas, June.....	9.54
	16.	Hardware.....	10.27
		Telephone, July.....	3.00
	30.	Labor and material.....	29.30
		Pay roll.....	650.00
Aug.	13.	48 rubber valves.....	31.20
	27.	Stationery.....	.70
		Pay roll.....	650.00
Sept.	3.	Gas, July.....	1.20
		Gas, August.....	13.86
		Hardware.....	.44
		Telephone, August.....	6.00
	17.	Repairing tin cans.....	1.35
		Box pomade.....	.50
		Barrel engine oil.....	20.14
		Barrel lime.....	.75
	24.	Pipe, etc.....	4.03
		Pay roll.....	817.46
		Lumber.....	4.37
		Rent 4 mill powers to October.....	1,000.00
		Hardware.....	.30
Oct.	1.	Material.....	1.92
		Barrel lime.....	.70
	29.	Inspecting boilers.....	11.00
		2 Dusters.....	1.50
		Gas, September.....	22.50
		Oil and gasoline.....	5.21
		2 Barrels lime.....	1.40
		Pay roll.....	886.68
		Telephone, September.....	3.00
		Telephone, October.....	3.00
Nov.	12.	1 Box candles.....	3.60
		Labor and material.....	1.50
		Hardware.....	1.59
		2 Wood cylinders.....	.70
		Gaskets.....	4.95
		1 Barrel gasoline.....	2.34
		1 Barrel oil.....	19.95
		1 Barrel lime.....	.70
	26.	90 Pounds waste.....	7.42
		Lumber.....	24.00
		1 Maple collar.....	.70
		Telephone, November.....	3.00
		1 Barrel gasoline.....	5.64
		Pay roll.....	670.39
Dec.	3.	Oil and can.....	1.59
		Repairing.....	4.31
		Hardware.....	10.13
	17.	1 Washer.....	.50
		Hardware.....	.20
		Gas, October.....	21.24
		Gas, November.....	27.54
		Telephone, December.....	3.00
		Pay roll.....	145.00
		1 Barrel Oil.....	9.04
		Glass.....	2.82
Total.....			\$14,695.57

Table No. 4.

Showing in Detail Expenditure on Account of Pump House No. 2 Expense.

1889.			
Jan.	2.	Payroll.....	\$14.00
		Coal.....	45.43
	15.	Gas, December 1888.....	13.32
	29.	Gasoline.....	5.56
		Coal.....	73.96
		Gas, January.....	20.34
		Payroll.....	574.46
		Telephone, January.....	3.00
Feb.	11.	Salt.....	.25
		Sharpening ice tools.....	7.20
		Telephone, February.....	3.00
	26.	Soldering tank.....	1.00
		Coal.....	48.90
		Repairing gauge.....	2.00
		Payroll.....	587.17
Mar.	12.	Gas, February.....	45.18
		Telephone, March.....	3.00
		Hardware.....	.50
		Material.....	15.16
April	2.	5 pounds candles.....	.63
		Labor and material.....	29.95
		Packing.....	10.50
		Coal.....	71.91
		1 barrel oil.....	13.22
		Telephone, April.....	3.00
		Payroll.....	358.37
	30.	Gas, March.....	35.82
		Hardware.....	1.38
		Oil.....	3.10
		1 barrel oil.....	5.78
		Payroll.....	340.00
May	14.	Labor and material.....	4.75
		100 feet fuse.....	.85
		Sharpening tools.....	1.10
		Material.....	33.30
	28.	Payroll.....	340.00
June	4.	Cement.....	3.25
	25.	2,500 register charts.....	7.50
		Waste hose, etc.....	67.30
		Telephone, May.....	3.00
		Telephone, June.....	3.00
		Gas, April.....	8.82
		" May.....	3.78
		Pay roll.....	340.00
July	2.	Gas, June.....	5.76
	16.	Telephone, July.....	3.00
	30.	Lumber.....	38.31
		Pay roll.....	368.64
Aug.	13.	Hardware.....	3.61
	27.	132 ^{lb} Waste.....	11.22
		Hardware.....	2.00
		Pay roll.....	340.00
Sept.	3.	Gas, July.....	6.80
		" August.....	4.68
		Telephone, August.....	3.00
	24.	Pay roll.....	361.64
Oct.	1.	Coal.....	17.13
	29.	Gas, September.....	9.18
		Hardware.....	1.20
		Repairing.....	7.00
		40 Sacks.....	2.00
		Pay roll.....	340.00
		".....	31.10
		Telephone, September.....	3.00
		" October.....	3.00
Nov.	12.	Polish.....	1.05
		Hardware.....	.69
	26.	114 ^{lb} Waste.....	9.40
		Gas pipe and labor.....	5.05
		Telephone, November.....	3.00
		Pay roll.....	323.08
Dec.	3.	Coal.....	40.59
		Lumber.....	6.00
	17.	Labor and material.....	3.20
		Policy on boiler, 3 years.....	30.00
		Gas, October.....	10.44
		" November.....	14.40
		Telephone, December.....	3.00
		1 Barrel oil.....	12.48
		Pay roll.....	288.81

Total.....

\$5,470.22

Table No. 5.

Showing in Detail Expenditures on Account of Pump House No. 3 Expense.

1889.			
Jany.	2.	Packing.....	\$4.42
	29.	Coal.....	238.54
Feb.	26.	Coal.....	112.30
		Telephone, February.....	3.00
Mar.	12.	Telephone, March.....	3.00
Apr.	2.	Telephone, April.....	3.00
		Pay roll.....	254.70
		Hardware.....	5.96
		Blacksmithing.....	2.20
		Oil.....	6.12
	30.	Oil.....	34.83
		Coal.....	82.67
		Pay roll.....	438.40
		Coal.....	129.30
		Pay roll.....	331.01
May	14.	Material.....	11.03
	28.	Pay roll.....	113.75
June	4.	Coal.....	755.65
		Oil.....	7.00
		Material.....	.70
	25.	Brooms, etc.....	9.36
		1 Barrel cylinder oil.....	45.90
		Telephone, May.....	3.00
		Telephone, June.....	3.00
		5 Gallons oil.....	1.25
		Pay roll.....	159.62
July	2.	Coal.....	487.99
	16.	Oil.....	184.05
		Telephone, July.....	3.00
		Linen and duck.....	1.39
	30.	Pay roll.....	86.05
		Pay roll.....	224.11
		Acid.....	5.88
		1 Thirty-five foot ladder.....	7.00
Aug.	27.	Pay roll.....	239.63
Sept.	3.	Sponges and brushes.....	5.00
		5 Pounds beeswax.....	2.00
		Telephone, August.....	3.00
	17.	1 Barrel oil.....	5.51
		Duty sheets.....	46.25
Oct.	1.	Hardware.....	12.00
		Packing.....	3.15
	29.	Soap and lye.....	8.15
		Glue.....	.80
		Brushes and sponges.....	3.00
		Hardware.....	5.05
		Coal.....	676.06
		Flue cleaner and expansions.....	2.70
		Pay roll.....	347.66
		Telephone September.....	3.00
		Telephone October.....	3.00
Nov.	12.	Hardware.....	21.79
		Material.....	9.20
		Ink.....	.80
		Gaskets, etc.....	26.15
	26.	Hardware.....	15.47
		Packing.....	1.90
		Material.....	1.05
		Stationery.....	1.90
		Telephone November.....	3.00
		Pay roll.....	821.20
Dec.	3.	Lumber.....	11.58
		Box candles.....	3.60
		Scales.....	75.00
		Coal.....	1,063.13
		Levers.....	.75
		Chimneys, brooms, etc.....	1.15
		Clamps, etc.....	8.07
		Rake handles.....	2.25
		Waste basket, etc.....	1.60
		Lumber.....	4.48
		Hardware.....	10.33
	17.	Two quires paper, 40x48.....	1.30
		One dozen cans pomade.....	3.60
		Hardware.....	1.33
		Telephone December.....	3.00
		Four gaskets.....	2.40
		One barrel oil.....	5.59
		Material.....	45.88
		Pay roll October.....	420.38

Total

\$7,691.02

Table No. 6.

Showing in Detail Expenditures on Account of Street Service Expense.

1889.			
Jany.	2.	Packing.....	\$7.00
		Coal.....	29.70
	15.	Hardware.....	1.60
		Corn.....	5.00
		Sole leather.....	8.17
		Labor and material.....	4.65
		Gas, December, '88.....	7.02
		Blacksmithing.....	7.25
		Hardware.....	3.85
	29.	Rent of tool house, January.....	125.00
		82 Loads sawdust.....	41.00
		Coal.....	32.16
		Corn.....	8.93
		Gas, January.....	7.20
		Pay roll.....	948.17
		Telephone, January.....	3.00
Feby.	11.	Printing.....	7.00
		Blacksmithing.....	8.05
		Hay.....	30.32
		Rent tool house, February.....	125.00
		Stationery.....	5.28
		Telephone, February.....	3.00
	26.	Map and fixtures.....	19.25
		Coal.....	8.00
		Pay roll.....	812.67
Mar.	12.	161 Bushels oats.....	48.55
		2 Barrels salt.....	2.50
		3 Bits.....	.90
		Gas, February.....	4.32
		Telephone, March.....	3.00
		Hardware.....	2.66
		Material.....	.70
		Rent tool house, March.....	125.00
		1 Load shavings.....	.50
Apr.	2.	Lumber.....	33.40
		Pay roll.....	36.00
		Coal.....	30.88
		Blacksmithing.....	5.00
		Stationery.....	.65
		Telephone, April.....	3.00
		Pay roll.....	866.79
	30.	Hardware.....	2.21
		Blacksmithing.....	14.25
		Gas, March.....	2.70
		Hardware.....	8.15
		".....	2.55
		".....	5.84
		Rent toolhouse, April.....	125.00
		2 Horses.....	265.00
		Pay roll.....	904.92
May	14.	Borax.....	7.75
		Blacksmithing.....	7.00
		Emery cloth.....	4.98
		Weights.....	9.65
		Material.....	30.38
	28.	Pay roll.....	931.04
June	4.	Feed and bran.....	3.05
		Blacksmithing.....	8.50
		Rent toolhouse, May.....	125.00
		Glass.....	2.73
		Cement.....	1.35
	25.	Labor and material.....	81.25
		Halter, &c.....	1.70
		Labor and material.....	160.02
		1640 Hay.....	5.74
		Rent tool house, June.....	125.00
		Telephone, May.....	3.00
		" June.....	3.00
		Gas, April.....	1.80
		" May.....	2.34
		Pay roll.....	902.67
July	2.	Rent Tool house, July.....	125.00
		Gas, June.....	.72
	16.	Hay and oats.....	78.84
		Lumber.....	6.00
		Telephone, July.....	3.00
		Labor and material.....	40.75
		Material.....	1.60
	30.	1 Pail axle grease.....	1.25
		Lumber.....	13.50
		Material.....	148.71

July	30.	1 Dozen Brooms.....	3 00
		Blacksmithing.....	14.75
		Material.....	16.85
		2,835 Hay.....	12.75
		Labor and material.....	29.35
		Pay roll.....	956.67
Aug.	13.	1,645 Hay.....	7.40
		Material.....	17.37
		Rent tool house, August.....	125.00
		Hardware.....	39.26
		Cleaning vaults.....	6.00
		Material.....	17.29
		2,525 Hay.....	10.73
		Pay roll.....	968.42
Sept.	3.	Repairing harness.....	5.25
		Gas, July.....	14.50
		Gas, August.....	1.26
		Hardware.....	.75
		Cement.....	1.33
		Telephone, Aug.....	6.00
		Blacksmithing.....	3.00
	17.	Hardware.....	14.55
	24.	258 Bushels oats.....	62.08
		Pay roll.....	943.42
Oct.	1.	Hardware.....	1.10
		2,215 Hay.....	9.41
		Hay and oats.....	34.65
		5 Gallons gasoline.....	.40
	29.	Brushes and sponges.....	33.20
		Gas, September.....	2.16
		Lumber.....	13.50
		Hardware.....	1.00
		Rent tool house, September.....	125.00
		Rent tool house, October.....	125.00
		Stationery.....	6.00
		3 Loads sawdust.....	1.00
		Pay roll.....	1,074.67
		Telephone, September.....	5.00
		Telephone, October.....	5.00
Nov.	12.	Labor and material.....	81.25
		Split sleeves, etc.....	34.30
		Hardware.....	6.00
		2,160 Hay.....	9.72
		Material.....	1.75
		Rent tool house, November.....	1.25
	26.	17,840 hay.....	74.36
		1 Barrel oil.....	5.10
		Sole leather.....	9.79
		Lumber.....	13.50
		Express on package from St. Paul.....	.25
		Valves, etc.....	6.81
		Stationery.....	1.15
		Telephone, November.....	3.00
		Pay roll.....	966.92
Dec.	3.	Coal.....	14.50
		Rent tool house, December.....	125.00
	17.	Blacksmithing.....	24.00
		Lumber.....	39.60
		Gas used in October.....	4.86
		Gas used in November.....	6.12
		Telephone, December.....	3.00
		1 load dry mill wood.....	1.75
		4,785 pounds corn.....	21.93
		Blacksmithing.....	2.00
		Material.....	.37
Total.....			\$13,882.16

Table No. 7.*Showing in Detail Expenditures on Account of Supervisors' Expense.*

1889.			
Jany.	15.	Stationery.....	\$.90
		Stationery.....	2.65
	20.	Stamp and pad.....	3.25
		Pay roll.....	276.36
		Telephone, January.....	3.00
Feby.	11.	Rubber bands.....	1.00
		Printing.....	10.50
		Telephone, February.....	4.00
	26.	Pay roll.....	190.00
Mar.	12.	Telephone, March.....	5.00
Apr.	2.	Pay roll.....	190.00
		1 Day book.....	2.25
		Stationery.....	9.05
		Telephone, April.....	4.00
	30.	Stationery.....	.25
		Pay roll.....	325.00
May	14.	Livery use.....	3.00
		Stationery.....	.98
	28.	Pay roll.....	325.00
June	25.	Telephone, May.....	4.00
		Telephone, June.....	8.65
		Pay roll.....	325.00
July	2.	500 Two-cent envelopes.....	12.00
	16.	Telephone, July.....	8.62
		Stationery.....	.95
	30.	½ Dozen files.....	.13
		Pay roll.....	325.00
Aug.	13.	Livery use, J. H. McConnell.....	80.00
	29.	Hardware.....	.60
		Pay roll.....	325.00
Sept.	3.	Telephone, August.....	7.00
	17.	Blank books.....	10.00
	24.	Pay roll.....	325.00
Oct.	1.	Pencils and pens.....	2.05
	29.	1 Dozen carbon paper.....	.43
		Pay roll.....	325.00
		Telephone, September.....	5.35
		Telephone, October.....	4.00
Nov.	12.	Ink.....	.30
	26.	1,000 Valves.....	10.00
		1,000 Bill heads.....	3.50
		Stationery.....	.70
		Telephone, November.....	4.00
		Pay roll.....	325.00
Dec.	17.	Telephone, December.....	4.00
		Pay roll.....	255.00

\$3,727.47**Table No. 8.***Showing in Detail Expenditure on Account of Office Expense.*

1889.			
Jan.	15.	Stationery.....	\$3.10
	29.	Pay roll.....	314.97
Feb.	11.	Rental No. 9.....	15.50
		Spindles.....	.40
	26.	Pay roll.....	315.01
Mar.	12.	Stationery.....	2.00
April	2.	Pay roll.....	315.02
		Repairing type-writer.....	1.50
		Pay roll.....	319.97
May	14.	2,000 Inspection slips.....	4.50
		Ink pad.....	.75
	28.	Pay roll.....	320.03
June	4.	Ink and mucilage.....	1.55
	25.	2,500 Statements.....	9.00
		Pay roll.....	320.00
July	30.	2,500 Registers.....	10.00
		1 Record Book.....	.55
		Pay roll.....	319.97
Aug.	13.	1 Gross pens.....	.60
	27.	1 Stamp.....	.25
		Pay roll.....	320.01
Sept.	3.	Pens, ink, etc.....	3.92
	24.	Pay roll.....	320.02
Oct.	29.	Pay roll.....	319.97
Nov.	12.	Rubber bands, &c.....	1.95
		Stamp and pad.....	2.25
		Stationery.....	.35
	26.	1 Stamp.....	2.00
		Pay roll.....	320.03
Dec.	17.	Pay roll.....	320.02

Total

\$3,885.19

Table No. 9.*Showing in Detail Expenditures on Account of Collection and Inspection Expense.*

1889.			
Jan.	2.	Envelopes.....	\$3.50
	29.	Pay roll.....	218.79
Feb.	11.	Postals and meter bill.....	15.75
	26.	Pay roll.....	140.00
Mar.	12.	1 cash book.....	6.50
		6,600 water statements.....	27.50
		Stationery.....	.40
April	2.	Pay roll.....	140.00
	30.	Blotters and envelopes.....	17.90
		Stationery.....	1.50
		Pay roll.....	166.90
May	28.	Pay roll.....	210.00
June	4.	Ink, etc.....	1.00
	25.	2,590 statements.....	6.75
		Pay roll.....	210.00
July	2.	Street washers.....	.40
	16.	3,000 envelopes.....	8.00
	30.	Pay roll.....	210.00
Aug.	27.	Pay roll.....	210.00
Sept.	3.	2,000 statements.....	6.50
	17.	500 postals (printed).....	7.25
	24.	Pay roll.....	210.00
Oct.	29.	7,000 water statements.....	30.00
		Pay roll.....	210.00
Nov.	12.	1,200 inspection blanks.....	3.50
		Stationery.....	1.20
		7,000 envelopes.....	17.50
		Petty cash book.....	6.50
	26.	Pay roll.....	210.00
Dec.	17.	Blank and postal cards.....	13.50
		Pay roll.....	210.00
		Money advanced for supplies.....	241.00
Total.....			\$2,761.84

Table No. 10.*Showing in Detail Expenditures on Account of Civil Engineer Expense.*

1889.			
Jan.	2.	Stationery.....	\$17.80
	29.	Pay roll.....	220.00
Feb.	11.	Stationery.....	3.80
	26.	Pay roll.....	220.00
April	2.	Pay roll.....	220.00
	30.	Stationery.....	9.25
		Pay roll.....	220.00
May	14.	400 reports.....	9.50
	28.	Pay roll.....	220.00
June	25.	Payroll.....	220.00
July	16.	Stationery.....	13.15
	30.	4 sub books.....	24.00
		Pay roll.....	220.00
Aug.	27.	Stationery.....	1.46
		Pay roll.....	220.00
Sept.	17.	Stationery.....	4.20
	24.	Pay roll.....	220.00
Oct.	29.	100 water main lists.....	11.50
		Pay roll.....	220.00
Nov.	12.	Stationery.....	10.65
	26.	Stationery.....	1.65
		Pay roll.....	220.00
Dec.	3.	Stationery.....	2.40
	17.	Pay roll.....	220.00
Total.....			\$2,749.36

Table No. 11.*Showing in Detail Expenditures on Account of Pipe-Hauling Expense.*

1889.			
Jan.	29.	Pay roll.....	\$94.15
Feb.	26.	Pay roll.....	70.00
Apr.	2.	Pay roll.....	70.00
		Pay roll.....	293.56
	30.	Pay roll.....	70.00
		Pay roll.....	205.01
May	28.	Pay roll.....	70.00
		Pay roll.....	414.04
June	25.	Hardware.....	7.10
		Pay roll.....	70.00
July	2.	Pay roll.....	376.05
	16.	Hardware.....	2.99
	30.	Pay roll.....	70.00
		Pay roll.....	251.92
Aug.	27.	Hardware.....	7.39
		Pay roll.....	70.00
Sept.	3.	Pay roll.....	545.25
	24.	Pay roll.....	70.00
		Pay roll.....	214.67
Oct.	1.	Surgical services (John McKinnon).....	15.00
	29.	Pay roll.....	33.25
		Pay roll.....	70.00
Nov.	26.	Pay roll.....	70.00
		Pay roll.....	108.50
Dec.	17.	Pay roll.....	70.00
		Weighing 7 loads pipe.....	.70
Total			\$3,339.58

Table No. 12.*Showing in Detail Expenditures on Account of Pump No. 1 Expense.*

1889.			
Sept.	17.	Labor and material....	\$0.25

Table No. 13.*Showing in Detail Expenditures on Account of Pump No. 2 Expense.*

1889.			
Feb.	26.	Material and work on water wheel.....	\$3.08
April	2.	Labor and material.....	4.58
		Blacksmithing	1.65
Total			\$9.31

Table No. 14.*Showing in Detail Expenditures on Account of Pump No. 4 Expense.*

1889.			
Jan.	29.	1 Flange.....	\$2.56

Table No. 15.*Showing in Detail Expenditures on Account of Pump No. 5 Expense.*

1889.			
Jan.	15.	Labor and material.....	\$1.60
	29.	1 Flange.....	2.56
Sept.	17.	Labor and material.....	1.25
Total			\$5.41

Table No. 16.*Showing in Detail Expenditures on Account of Pump No. 6 Expense.*

1889.			
Jan.	15.	Labor and material.....	\$34.10
Sept.	17.	Labor and material.....	3.25
Total			\$37.35

Table No. 17.*Showing in Detail Expenditures on Account of Pump No. 7 Expense.*

1889.			
Dec.	17.	Labor and material.....	\$32.85

Table No. 18.*Showing in Detail Expenditures on Account of Diving Apparatus.*

1889.			
Jan.	2.	Mittens.....	\$6.00
April	30.	Labor and material.....	5.30
May	14.	Repairing suit.....	1.00
Oct.	29.	" ".....	1.00
Nov.	26.	" ".....	16.50
		" ".....	1.25
Dec.	17.	" ".....	1.75
Total.....			\$32.80

Table No. 19.*Showing in Detail Expenditures on Account of Meter Expense.*

1889.			
Jan.	15.	Hardware.....	\$ 50
	29.	Packing.....	2.50
Feb.	11.	Hardware.....	.60
		Packing.....	1.95
		Blank book.....	.75
March	12.	Setting meter at Hotel Brunswick.....	7.00
		Stationery.....	1.80
April	2.	Material.....	8.31
	30.	Hardware.....	.10
May	14.	Emery cloth.....	1.96
	25.	Hardware.....	.85
July	16.	3 books.....	23.00
	30.	1 carton candles.....	.81
Aug.	27.	Hardware.....	1.25
Sept.	17.	Repairing "Duluth" meter.....	17.84
	24.	1 box sealing wax.....	.35
Oct.	29.	Hardware.....	.60
Nov.	12.	Hardware.....	1.30
		Money advanced for supplies.....	28.28
Total.....			\$99.75

Table No. 20.*Showing in Detail Expenditures on Account of Steam Plant Expense.*

1889.			
Jan.	15.	Labor and material.....	\$3.50
Feb.	11.	Flue, cleaner, blower &c.....	7.94
	26.	Testing steam gauge.....	1.50
April	2.	Blacksmithing.....	.86
Total.....			\$13.80

Table No. 21.*Showing in Detail Expenditures on Account of Pump House No. 3.*

1889.			
Jan.	2.	Coal.....	\$87.18
		Sewer pipe.....	1.26
		Second estimate steam heating apparatus.....	500.00
		First estimate electric light plant.....	1,200.00
		Pay roll.....	481.87
	15.	Hardware.....	25.80
		Oil.....	40.30
		Hardware.....	41.96
		Check valves.....	.65
		Livery use.....	13.50
		Sharpening tools.....	3.02
		Pay roll.....	520.06
	29.	Gal. shellac.....	3.50
		Lumber.....	303.32
		Hardware.....	21.98
		Blacksmithing.....	44.65
		Pay roll.....	353.75
		Labor and material.....	2.25
Feb.	11.	Hardware.....	35.56
		Hardware.....	26.43
		Final estimate electric light plant.....	300.00
		Pay roll.....	415.60
	26.	Sewer pipe and cement.....	66.84
		62½ perch rock.....	50.00
		Coal.....	65.30
		20 lbs. waste.....	2.00
		Pay roll.....	240.15
Mar.	12.	Hardware.....	.80
		153 sacks.....	10.71
		Cement.....	20.80
		Pay roll.....	250.80
		Labor and material.....	173.20

April 30.	Cement.....	50.50
	Final estimate steam plant.....	225.00
	Estimate on pumps.....	16,000.00
	45 bbls. cement.....	60.75
	2 turn tables.....	50.00
	Livery use.....	11.50
	Material.....	8.46
	Cement, fire brick, etc.....	163.19
	32,000.....	323.00
	Extra material for roof trusses.....	47.60
May 14.	Lumber.....	4.62
	Iron plates.....	136.56
	Blacksmithing.....	166.20
	15 Barrels Cement.....	20.25
	Material.....	7.38
	Lumber.....	6.11
	4 Fire tubes.....	1.20
	Emery cloth.....	.10
	Material.....	8.45
	Cement.....	38.70
June 28.	Material.....	53.66
	Pay roll.....	257.83
	Pay roll.....	191.64
	Hardware.....	.65
	Boiler iron.....	37.59
	Labor and material.....	18.00
	Iron pipe, &c.....	1.50
	Material.....	5.57
	3,400 Brick.....	19.62
	Doors.....	34.00
July 2.	Steel and labor.....	17.75
	Laying floors.....	5.60
	Blacksmithing.....	736.63
	Brass rail around electric plant.....	16.43
	Pay roll.....	80.00
	Hardware.....	182.30
	Labor and material.....	92.72
	Hardware.....	185.15
	Hardware.....	27.47
	Hardware.....	23.27
30.	7 Screen posts.....	213.20
	Material.....	92.16
	Pay roll.....	108.26
	Estimate on pumps.....	57.50
	Furnishing hardwood ceiling.....	236.88
	Hardware.....	231.41
	7 ft. 8 in. Walnut.....	1.40
	Material.....	.68
	24 Iron plates.....	3.60
	Hardware.....	3.85
27.	Lumber.....	14.65
	Furnishing inside wood work.....	51.00
	Gate house, stone steps, etc.....	500.00
	Pay roll.....	3.00
	Labor and material.....	4.39
	Flue cleaner, etc.....	3.41
	Oak flooring.....	63.12
	1 Gallon preservative.....	2.50
	Hardware.....	6.59
	Pipes, valves and elbows.....	32.86
Oct. 1.	Hardware.....	.72
	Corner blocks.....	5.99
	Painting walls in office and halls.....	.70
	Mouldings.....	95.00
	50 Electric lamps.....	7.50
	Ceiling and flooring.....	32.50
	Hardware.....	36.57
	Hardware.....	8.13
	Material.....	1.16
	Desk and 6 chairs.....	2.37
Nov. 12.	Material.....	45.00
	Coal chute and material.....	21.64
	Pay roll.....	1,321.96
	Lumber.....	137.00
	2 Lamps.....	34.07
	Labor and material.....	4.00
	Hardware.....	62.14
	Hardware.....	9.49
	Hardware.....	.93
	2 Perch rock.....	1.60
Dec. 3.	1,000 feet 2x12 plank.....	12.50
	6 Barrels cement.....	10.15
	1 Office table.....	7.50
	Lumber.....	2.30
	Lumber.....	2.30
	Lumber.....	2.30
	Lumber.....	2.30
	Lumber.....	2.30
	Lumber.....	2.30
	Lumber.....	2.30
Total.....		833,804.07

Table No. 22.*Showing in Detail Expenditures on Account of Street Mains.*

1889.			
Jan.	2.	Lowering pipe in Groveland av.....	\$221.11
		Taking up pipe at Diamond mill.....	190.75
Aug.	13.	Gates and covers.....	352.94
Sept.	24.	Valves.....	44.40
		25 Hydrant Covers.....	81.25
Oct.	29.	Reducers and sleeves.....	22.82
Dec.	3.	Gate covers, etc.....	633.68
	17.	Labor and material.....	58.45
Total.....			\$1,605.40

Table No. 23.*Showing in Detail Expenditures on Account of Meter Account.*

1889.			
Jan.	25.	29 Meters.....	605.00
		46 Meters.....	1,024.00
Oct.	29.	24 Meters.....	525.00
		14 Meters.....	308.00
Dec.	17.	18 Meters.....	268.50
		3 Meter.....	264.00
		Three 3-inch meters and twelve counters.....	291.75
Total.....			\$3,286.25

Table No 24*Showing in Detail Expenditures on Account of Stand Pipe Expenses.*

1889.			
Jan.	29.	Hardware.....	\$83.11
Feb.	11.	Hardware.....	12.55
		Labor and material.....	40.80
Mar.	12.	Repairing hydrants.....	4.80
April	2.	Material.....	218.05
	30.	Repairing standpipes.....	1.00
		Hardware.....	.40
		Hardware.....	3.18
May	14.	Lag screws.....	1.87
		Material.....	136.57
June	4.	Seven gate cones.....	14.80
		Material.....	192.26
	25.	Labor and material.....	4.80
		Labor and material.....	96.20
Aug.	13.	Standpipes.....	172.84
Sept.	17.	Fittings.....	9.13
Total.....			\$992.36

Table No. 25.*Showing in Detail Expenditures on Account of Erroneous Main Assessments.*

1889.			
Jan.	2.	J. B. Gilfillan.....	\$128.70
		J. S. Pillsbury.....	128.70
		J. A. Camp.....	55.12
		J. S. Gillette.....	31.20
		H. F. Brown.....	110.24
		L. F. Menage.....	110.24
		E. S. Jones.....	65.39
		J. E. Bell.....	59.35
		Gilfillan & Martin.....	28.60
		W. A. Nimocks.....	163.35
		Wm. Lochran.....	64.35
		J. B. Gilfillan.....	64.35
		E. K. Smith.....	80.60
		F. C. Griswald.....	142.35
		Security bank.....	85.80
		P. Herzog.....	77.63
		G. A. Pillsbury.....	13.50
		J. W. Stone, agent.....	55.69
		Chute Bros.....	123.19
15.		A. F. Kelley.....	31.20
		F. A. Dunnsmoor, agent.....	93.60
		W. W. Parker.....	93.60
		L. B. Elwood.....	34.32
		Nellie B. Mead.....	35.88
		Gale, Rust & Co.....	102.05
		D. Morrison.....	117.00
		M. O. Hunter.....	68.64
29.		Corser & Co.....	22.28
		W. A. Nimocks.....	33.75

Jan.	20.	Geo. W. Ringrose.....	85.31
		E. S. Corser.....	31.20
		Cassiday & Findlay.....	31.20
		G. W. McClelland.....	31.20
		A. B. Oviatt.....	81.25
Feb.	11.	D. M. Gilmore.....	60.00
		K. W. Wing, agent.....	39.83
		M. Roeller.....	42.22
		Mrs. G. W. Hale.....	31.20
		Geo. Huhn.....	31.20
		L. B. Elwood.....	31.20
		H. C. Henry.....	31.20
		Stevens and Newman.....	15.60
		O. P. Vangness.....	41.96
		Christ Engle.....	61.10
Mar.	12.	C. A. Nimocks, agent.....	119.60
		Chas. Bohannan.....	523.25
		O. Westling.....	18.75
		John Grabow.....	21.45
April	2. 30.	C. A. Nimocks.....	26.65
		E. H. Moulton.....	1,545.98
		Bridget Stewart.....	42.90
		Geo. A. Brackett.....	37.13
		E. G. E. Dodge.....	16.63
		A. W. French.....	88.09
		Mathias Kreek.....	26.00
		Frank Jabst.....	28.60
		Harland S. Orton.....	76.05
		C. A. Nimocks, agent.....	602.33
		J. P. Allaise.....	55.12
		Kalph Hedemask.....	19.50
		E. J. Rees.....	17.87
		C. A. Nimocks.....	461.03
May	14.	A. E. Allen.....	26.00
		John Haulson.....	16.90
		B. F. Nelson.....	48.10
		G. A. Castle.....	102.05
		C. A. Nimocks.....	155.93
		John P. Sherrin.....	26.00
		O. Hedaman.....	16.90
		J. C. Beck.....	32.50
		O. A. Sutton.....	47.33
		K. Kartgaard.....	55.90
		C. A. Nimocks.....	48.68
		Frank Ganyer.....	26.00
		John B. Conlee.....	32.50
		Frank Clukey.....	26.00
June	4.	Nels Anderson.....	63.70
		Jas. E. Preat.....	26.00
		M. Ingemoen.....	29.27
		P. A. Turretzen.....	13.00
		Jas. Bell.....	26.00
		Mendoe McKenzie.....	55.90
		C. A. Nimocks.....	416.61
		Mary Kane.....	13.00
		C. W. Case.....	28.60
		C. F. Anderson.....	26.00
		W. A. Barnes.....	28.22
		John Martin.....	379.64
		Jacob Clementsen.....	13.00
		Andrew Johnson.....	27.30
		Albert Knoby.....	37.70
		Deere & Co.....	32.50
		B. W. Rand.....	21.45
		F. W. Cook.....	26.00
		Louisa F. Robinson.....	37.70
		A. P. Morton.....	35.75
		Corser & Co.....	31.20
		P. B. Lacy.....	58.04
		E. C. Mower.....	31.20
		L. R. Thein.....	35.75
		R. D. Russell.....	30.88
		John A. Anderson.....	31.20
July	2.	Jacob Danner.....	41.37
		C. A. Nimocks.....	2,900.87
		Albert Nary.....	37.70
		John Hauslick.....	26.00
		E. H. Moulton.....	34,339.77
		Paul Maussa.....	16.25
		E. L. Douglass.....	26.00
		C. A. Nimocks.....	167.75
		Louisa M. Leonard.....	6.50
		Mrs. Wm. Danes.....	42.90
Aug.	13.	W. E. Vrooman.....	5.85
		C. H. Wheeler.....	82.68
		C. A. Nimocks.....	773.00

Sept. 24.	K. W. Wing.....	33.99
	Wm. Styp.....	49.95
	A. F. Nelson.....	87.75
	C. A. Nimocks.....	1,227.64
Oct. 1.	R. C. Haywood.....	77.13
Nov. 12.	C. Nimocks.....	692.36
	John Kelly.....	32.50
	Geo. C. Stillman.....	15.95
	Paul Foxtin.....	26.00
	J. C. Tehn.....	26.00
	Louis Salberg.....	58.56
	J. A. Fagan.....	83.56
	C. A. Nimocks.....	27.30
	Chas. T. Thompson.....	76.62
Dec. 3.	C. A. Nimocks.....	123.50
	E. H. Moulton.....	654.26
17.	C. A. Nimocks.....	32.50
	C. A. Nimocks.....	111.38
	518 Descriptions.....	15.54
Total.....		\$50,822.80

Table No. 26.

Showing in Detail Expenditures on Account of General Expense.

1889.			
Jan. 2.	Envelopes.....	\$7.00	
29.	Freight on wood.....	11.12	
	Telephone, January.....	6.00	
Feb. 11.	1,000 Statements.....	3.50	
	Telephone, February.....	6.00	
Mar. 12.	" March.....	6.00	
April 2.	" April.....	6.00	
30.	Stationery.....	.88	
May 14.	Material.....	5.14	
June 4.	Lumber.....	12.50	
25.	Telephone, May.....	6.00	
	" June.....	6.00	
July 16.	" July.....	6.00	
	Stampboxes, &c. (Samples).....	6.31	
Sept. 17.	Printing annual report of 1888.....	217.00	
Oct. 1.	Hardware.....	1.65	
29.	Oil and Gasoline.....	4.67	
	Telephone, September.....	6.00	
	" October.....	6.00	
Nov. 26.	" November.....	6.00	
Dec. 3.	Work done, looking for leak.....	4.55	
17.	Telephone, December.....	6.00	
	67 Loads sawdust.....	50.25	
	Labor and material.....	.75	
	Money advanced for supplies.....	28.13	
	Lumber.....	71.00	
Total.....		\$490.45	

Table No. 27.

Showing in Detail Expenditures on Account of Rebates.

1889.			
Jan. 2.	C. L. Woehler.....	\$2.50	
	A. J. Condit.....	5.45	
	A. G. Smith.....	12.30	
	W. W. Woodward.....	60.00	
	M. McAlpin.....	12.50	
Feb. 26.	F. L. Mortimer.....	10.00	
	J. W. Gillam estate.....	18.15	
	Smith & Parker.....	7.00	
	R. P. Dunnington.....	8.75	
April 2.	John A. Grimstead.....	3.00	
	Geo. L. Hilt.....	7.25	
	J. M. Robinson.....	20.00	
	Mrs. H. A. Chase.....	4.00	
	M. A. James.....	3.00	
	John McNally.....	3.00	
May 14.	Stephen McBride.....	20.75	
	C. E. Reynolds.....	1.00	
	John Miller.....	2.75	
	Mrs. M. E. Howe.....	3.40	
	H. Bidwell.....	4.00	
June 25.	Thos. King.....	3.50	
	Pitt Mathews.....	3.00	
	M. B. Koon.....	8.00	
	Brown & McIntyre.....	12.50	
	A. E. Allen.....	1.50	
	M. H. Crittenden.....	4.00	
	John Watson.....	40.40	
	Paul Schmedeman.....	5.00	

Aug.	13.	Episcopal Resn. Ass'n	9.90	
		H. H. Wadsworth	6.00	
		R. H. Newlon	3.00	
		Jos. Menard	4.00	
Oct.	29.	H. T. Shephard	4.00	
		Chas. M. Green	4.00	
		Enos Campbell	7.30	
		E. T. Sykes	9.75	
		A. B. Barton	11.30	
		B. Cooper	40.00	
		John Fowler	5.75	
		Josiah Thompson	20.44	
		Mathias Kees	10.00	
Dec.	3.	F. M. Parcher	24.35	
		L. Jepson	3.00	
		W. N. Allen	9.00	
		Mrs. Nellie Fletcher	19.80	
		W. W. Huntington	43.30	
		R. D. Russell	5.50	
		Total . . . . .			$527.29

Table No. 28.*Showing in Detail Expenditures on Account of Pump House No. 1.*

1889.	Mar.	12.	Hunter, Scott & Co., plumbing and material.....	\$304.71
-------	------	-----	---	----------

Table No. 29.*Showing the Amount Transferred to the Improvement Fund.*

1889.	Mar.	12.	Transferred to permanent improvement fund.....	\$50,000.00
	Dec.	17.	Transferred to permanent improvement fund.....	50,000.00
Total.....				\$100,000.00

Table No. 30.*Showing in Detail Expenditures on Account of Tapping Material.*

1889.	May	14.	164 corporation cocks.....	\$143.75
	June	25.	150 corporation cocks.....	66.00
	July	2.	83 corporation cocks.....	70.55
		30.	95 corporation cocks.....	83.90
	Aug.	13.	37 corporation cocks.....	31.45
		27.	Cartage.....	.25
	Sept.	3.	152 corporation cocks.....	117.44
		24.	97 corporation cocks.....	82.45
	Dec.	3.	151 corporation cocks.....	112.11
Total.....				\$707.90

Table No. 31.*Showing in Detail Expenditures on Account of Water Main Advancements.*

1889.	June	25.	P. D. McMillan.....	\$600.00
			L. F. Menage.....	1,037.30
	July	2.	Michael Lyons.....	52.00
		30.	Geo. L. Brimhall.....	1,045.00
			F. Von Schlegell.....	800.00
			W. D. Washburn.....	544.00
Total.....				\$4,078.30

Table No. 32.*Showing in Detail Expenditures on Account of Plumber's Expense.*

1889.	April	2.	750 Time sheets.....	\$1.50
			Material.....	101.33
			Pay roll.....	71.70
		30.	5 Gallons gasoline.....	.60
			Paint.....	.55
			Hardware.....	2.10
			Hardware.....	15.18
			Pay roll.....	136.00
	May	14.	Borax.....	1.00
			Material.....	.30
		28.	Pay roll.....	1.48
	June	4.	Hardware.....	.20
			Material.....	8.31

June	25.	Labor and material.....	4.50
		Oil.....	.60
		Material.....	2.50
		Pay roll.....	137.50
July	2.	5 Gallons gasoline.....	.50
		Stove pipe.....	.67
	16.	Material.....	1.18
	30.	Labor and material.....	5.85
		Material.....	16.97
		Pay roll.....	143.00
Aug.	13.	Material.....	12.49
	27.	Hardware.....	.15
		Material.....	1.88
		Material.....	4.60
		Pay roll.....	148.50
Sept.	3.	Cement.....	.50
	24.	Pipe, etc.....	10.27
		Lead, etc.....	13.37
		Pay roll.....	143.00
Oct.	1.	Material.....	.63
	29.	Material.....	7.22
		Pay roll.....	159.50
Nov.	12.	Oil.....	1.00
		Material.....	1.84
	26.	Material.....	3.35
		Pay roll.....	143.00
Dec.	17.	1 Ball cock.....	1.00
		Material.....	3.22
Total.....			\$1,455.51

Table No. 33.

Showing in Detail Expenditures on Account of Blacksmith's Expense.

Showing in Detail Expenditures on Account of Bucksmith's Expenses				
1889.				
Apr.	2.	2 Sash.....		\$1.60
		Coal.....		7.25
		750 time sheets.....		1.50
		Labor and material.....		17.80
		Pay roll.....		70.25
	30.	Paint.....		1.15
		Hardware.....		52.90
		".....		5.06
		Labor and material.....		1.80
		Pay roll.....		117.00
May	14.	Hardware.....		17.00
		Coal.....		7.49
	28.	Pay roll.....		121.50
June	25.	Oil.....		1.50
		Hardware.....		5.28
		Pay roll.....		112.50
July	2.	Coal.....		11.04
	16.	1 gal. lard oil.....		.90
		Hardware.....		18.00
	30.	Pay roll.....		121.50
Aug.	13.	Hardware.....		18.28
	27.	Coal.....		7.00
		Pay roll.....		121.50
Sept.	17.	Hardware.....		21.68
	24.	Pay roll.....		112.50
Oct.	1.	Coal.....		7.00
	29.	Hardware.....		5.18
		Coal.....		7.00
		Pay roll.....		121.50
Nov.	12.	Hardware.....		24.49
	26.	Pay roll.....		117.00
Dec.	17.	Hardware.....		.35
Total.....				\$1,256.50

Table No. 34.

Showing in Detail Expenditures on Account of Oil Test.

1889.				
April	30.	Hardware.....		\$0.67
		".....		63.85
		Cement.....		52.50
		44 bbls. crude oil.....		55.70
May	14.	Brick.....		11.48
		Material.....		10.43
	28.	Estimate of B. F. Knerr.....		150.00
June	4.	Glass.....		2.10
		Boiler iron.....		39.90
		Total.....		

Table No. 35.

Showing in Detail Expenditures on Account of Extension No. 472, in Third St. N. from Sixth Ave. N. to Plymouth Ave.

1889.			
June 25.	4 16-in. flexible joints	\$192.00	
Dec. 3.	2,778 ft. 16-in. pipe	4,692.80	
	66 ft. 6-in. pipe	29.90	
	14 ft. 8-in. pipe	9.27	
	10 ft. 16-in. pipe	16.89	
	7 hydrants	255.50	
	3 6-in. gates	39.90	
	2 8-in. gates	38.00	
	4 16-in. gates	260.00	
	8,274 lbs. lead	306.14	
	18,510 lbs. specials	370.20	
	Pay roll	1,125.07	
	Supplies	106.77	
Total			\$7,442.44

Table No. 36.

Showing in Detail Expenditures on Account of Extension No. 419, in Colfax Ave. S. from W. Twenty-fourth St. to W. Twenty-seventh St.

1889.			
Dec. 3.	1,961 ft. 6-in. pipe	\$893.96	
	4 hydrants	146.00	
	2 6-in. gates	26.60	
	1,468 lbs. lead	54.32	
	1,149 lbs. specials	22.98	
	Pay roll	354.41	
	Supplies	62.23	
Total			\$1,560.50

Table No. 37.

Showing in Detail Expenditures on Account of Extension No. 489 on Washington Ave. N. Across Bassett's Creek.

1889.			
Jan. 2.	Sawdust	\$6.65	
	9 loads of sawdust	2.25	
Dec. 3.	483 ft. 8-in. pipe	317.72	
	632 lbs. lead	23.38	
	1,196 lbs. specials	23.92	
	Pay roll	183.45	
	Supplies	12.46	
Total			\$569.84

Table No. 38.

Showing in Detail Expenditures on Account of Extension No. 421, in Eighth st. S. from Twenty-firstst Ave. S. to Twenty-second Ave. S.

1889.			
Dec. 3.	375 ft. 6-in. pipe	\$171.01	
	4 ft. 8-in. pipe	2.69	
	1 hydrant	36.50	
	1 6-in. gate	13.30	
	376 lbs. lead	13.91	
	600 lbs. specials	13.92	
	Pay roll	126.00	
	Supplies	12.94	
Total			\$390.27

Table No. 39.

Showing in Detail Expenditures on Account of Extension No. 422, in Eighth St. S. from Fifth Ave. S. to Sixth Ave. S.

1889.			
Dec. 2.	375 ft. 12-in. pipe	\$422.28	
	12-in. gate	36.00	
	741 lbs. lead	27.42	
	756 lbs. specials	15.12	
	Pay roll	169.72	
	Supplies	43.69	
Total			\$704.33

Table No. 40.

Showing in Detail Expenditures on Account of Extension No. 423, in Eighth St. from Seventh Ave. S. to Eleventh Ave. S.

1889.			
Dec.	2.	1,630 ft. 12-in. pipe.....	\$1,923.42
		28 ft. 6-in. pipe.....	12.62
		4 hydrants.....	146.00
		2 Gates.....	72.00
		3,208 lbs. lead.....	118.70
		4,692 lbs. specials.....	93.84
		Pay roll.....	748.92
		Supplies.....	54.52
Total.....			\$3,170.02

Table No. 41.

Showing in Detail Expenditures on Account of Extension No. 427, in Fourth St. S. from Sixth Ave. S. to Eleventh Ave. S.

1889.			
Dec.	3.	2,026 ft. 12-in. pipe.....	\$2,389.62
		56 ft. 6-in. pipe.....	25.88
		9 ft. 12-in pipe.....	8.49
		5 hydrants.....	182.50
		3 12-in. gates.....	108.00
		2 6-in. gates.....	26.60
		4,390 lbs. lead.....	163.43
		7,031 lbs. specials.....	140.62
		Pay roll.....	791.92
		Supplies.....	69.54
Total.....			\$3,906.60

Table No. 42.

Showing in Detail Expenditures on Account of Extension No. 428, in E. Fourteenth St. from First Ave. S. to Stevens Ave.

1886.			
Dec.	3.	310 ft. 8-in. pipe.....	\$203.98
		10 ft. 6-in. pipe.....	4.56
		1 hydrant.....	36.50
		1 8-in. gate.....	19.00
		440 lbs. lead.....	16.28
		759 lbs. specials.....	15.18
		Pay roll.....	149.01
		Supplies.....	11.49
Total.....			\$456.00

Table No. 43.

Showing in Detail Expenditures on Account of Extension No. 430, in Fourteenth Ave. S. from E. Eighteenth St. to E. Franklin Ave.

1889.			
Dec.	3.	916 ft. 6-in. pipe.....	\$417.45
		14 ft. 6-in. pipe.....	6.52
		2 hydrants.....	73.00
		1 6-ft. gate.....	13.30
		748 lbs. lead.....	27.68
		746 lbs. specials.....	14.92
		Pay roll.....	220.69
		Supplies.....	6.55
Total.....			\$780.11

Table No. 44.

Showing in Detail Expenditures on Account of Extension No. 433, in First Ave. S. from Twelfth St. to Fourteenth St.

1889.			
Dec.	3.	1,002 ft. 24-in. pipe.....	\$3,306.92
		110 ft. 6-in. pipe.....	50.18
		66 ft. 8-in. pipe.....	43.50
		3 ft. 12-in. pipe.....	4.48
		3 hydrants.....	109.50
		3 6-ft. gates.....	39.90
		1 8-ft. gate.....	19.00
		2 24-ft. gates.....	416.00
		6,507 lbs. lead.....	240.76
		29,606 lbs. specials.....	592.12
		Pay roll.....	593.77
		Supplies.....	43.44
Total.....			\$5,459.57

Table No. 45.

Showing in Detail Expenditures on Account of Extension No. 435 in Fourteenth Ave. S. E. from Fourth St. S. E. to Como Ave.

1889.			
Dec.	3.	2,886 ft. 12-inch pipe.....	\$3,403.99
		57 ft. 6-inch pipe.....	26.34
		16 ft. 12-inch pipe.....	19.22
		7 hydrants.....	255.50
		6 6-inch gates.....	79.80
		4 12-inch gates.....	144.00
		1 8-inch gate.....	19.00
		6,234 lbs. lead.....	230.66
		13,123 lbs. specials.....	262.46
		Pay roll.....	979.83
		Supplies.....	101.39
Total.....			\$5,522.19

Table No. 46.

Showing in Detail Expenditures on Account of Extension No. 439 in Hawthorne Ave. from Tenth St. N. to Twelfth St. N.

1889.			
Dec.	3.	776 ft. 16-inch pipe.....	\$1,311.07
		9 ft. 6-inch pipe.....	3.97
		8 ft. 24-inch pipe.....	26.40
		1 24-inch gate.....	208.00
		2 6-inch gates.....	26.60
		1 16-inch gate.....	65.00
		2,426 lbs. lead.....	89.76
		4,827 lbs. specials.....	96.54
		Pay roll.....	422.62
		Supplies.....	24.54
Total.....			\$2,274.50

Table No. 47.

Showing in Detail Expenditures on Account of Extension No. 440, in Hawthorne Ave. from Ninth St. to Tenth St.

1889.			
Dec.	3.	324 ft. six-in. pipe.....	\$546.76
		5 ft. 6-inch pipe.....	2.55
		1 hydrant.....	36.50
		1 16-in. gate.....	65.00
		934 lbs. lead.....	34.56
		2,395 lbs. specials.....	47.90
		Pay roll.....	148.98
		Supplies.....	11.94
Total.....			\$894.19

Table No. 48.

Showing in Detail Expenditures on Account of Extension No. 441, in Jefferson St. N. E., from Summer St. to near Thirteenth Ave. N. E.

1889.			
Dec.	3.	1,110 ft. 8-in. pipe.....	\$729.63
		10 ft. 6-in. pipe.....	4.60
		2 hydrants.....	73.00
		1 8-in. gate.....	19.00
		1,340 lbs. lead.....	49.58
		1,176 lbs. specials.....	23.52
		Pay roll.....	374.30
		Supplies.....	34.41
Total.....			\$1,308.04

Table No. 49.

Showing in Detail Expenditures on Account of Extension No. 442 in James Ave. N., from Western Ave. to Fifth Ave. N.

1889.			
Dec.	3.	604 ft. 6-in. pipe.....	\$275.52
		10 ft. 6-in. pipe.....	4.69
		2 hydrants.....	73.00
		1 6-in. gate.....	13.30
		532 lbs. lead.....	19.68
		610 lbs. specials.....	12.20
		Pay roll.....	214.05
		Supplies.....	21.94
Totals.....			\$634.38

Table No. 50.

*Showing in Detail Expenditures on Account of Extension No. 444 in Lyndale Ave.
N. from Twenty-Sixth Ave. N. to Twenty-Ninth Ave. N.*

1889.			
Dec.	3.	3,716 ft. 16-in. pipe.....	\$6,276.49
		37 ft. 6-in. pipe.....	16.91
		35 ft. 8-in. pipe.....	23.39
		8 hydrants.....	292.00
		5 ft. 16-in. gates.....	325.00
		2 ft. 8-in. gates.....	38.00
		10,001 lbs. lead.....	370.04
		11,975 lbs. specials.....	239.50
		Pay roll.....	1,723.64
		Supplies.....	122.48
Totals.....			\$9,427.45

Table No. 51.

*Showing in Detail Expenditures on Account of Extension No. 445 in Lyndale Ave.
from Erie Ave. to W. Twenty-fourth street.*

1889.			
Dec.	3.	4,675 ft. 24-in. pipe.....	\$15,427.23
		58 " 6 " ".....	26.75
		110 " 8 " ".....	72.62
		112 " 12 " ".....	132.32
		8 hydrants.....	292.00
		16-inch gate.....	13.30
		1 12 " ".....	36.00
		5 24 " ".....	36.00
		23,199 lbs. lead.....	1,248.00
		34,830 lbs. specials.....	858.36
		Pay roll.....	696.60
		Supplies.....	2,008.02
		Supplies.....	39.70
Total.....			\$20,850.90

Table No. 52.

*Showing in Detail Expenditures on Account of Extension No. 446, in Lyndale Ave.
from Hawthorne Ave. to Laurel Ave.*

1889.			
Dec.	3.	363 ft. 24-in. pipe.....	1,199.10
		8 " 6 " ".....	369.00
		1 24-inch gate.....	208.00
		1,982 lbs. lead.....	73.33
		2,198 " specials.....	43.96
		Pay roll.....	361.73
		Supplies.....	12.75
Total.....			\$1,902.56

Table No. 53.

*Showing in Detail Expenditures on Account of Extension No. 452, in Nineteenth
Ave. S. from Seventh St. S. to Eighth St. S.*

1889.			
Dec.	3.	477 ft. 6-in. pipe.....	\$217.41
		1 hydrant.....	36.50
		368 lbs. lead.....	13.62
		288 lbs. specials.....	5.76
		Pay roll.....	134.50
		Supplies.....	14.82
Total.....			\$422.61

Table No. 54.

*Showing in Detail Expenditures on Account of Extension No. 455, in Ninth St. N.
from Second Ave. N. to Hawthorne Ave.*

1889.			
Dec.	3.	757 ft. 16-in. pipe.....	\$1,279.32
		23 ft. 6-in. pipe.....	10.35
		2 hydrants.....	73.00
		1 16-in. gate.....	65.00
		2 6-in. gates.....	26.60
		2,325 lbs. lead.....	86.03
		4,877 lbs. specials.....	97.54
		Pay roll.....	331.83
		Supplies.....	27.27
Total.....			\$1,996.94

Table No. 55.

Showing in Detail Expenditures on Account of Extension No. 456, in Oak Lake Ave. from Sixth Ave. N. to Eighth Ave. N.

1889.			
Dec.	3.	728 ft. 6-in. pipe.....	\$331.90
		1 hydrant.....	36.50
		1 6-in. gate.....	13.30
		400 lbs. lead.....	23.68
		944 lbs. specials.....	18.88
		Pay roll.....	204.75
		Supplies.....	21.69
Total.....			\$650.70

Table No. 56.

Showing in Detail Expenditures on Account of Extension No. 457 in Plymouth Ave. from Sixth Ave. N. to Lyndale Ave.

1889.			
Dec.	3.	326 ft. 8-in. pipe.....	\$214.36
		10 ft. 6-in pipe.....	4.60
		6 ft. 10-in. pipe.....	5.82
		10 ft. 16-in. pipe.....	17.57
		2 hydrants.....	73.00
		1 8-in. gate.....	19.00
		1 10-in. gate.....	28.10
		731 lbs. lead.....	27.05
		2,174 lbs. specials.....	43.48
		Pay roll.....	169.58
		Supplies.....	15.58
Total.....			\$618.14

Table No. 57.

Showing in Detail Expenditures on Account of Extension No. 458, in Pleasant Ave. from W. Twenty-fourth St. to W. Twenty-sixth St.

1889.			
Dec.	3.	1,299 ft. 8-in. pipe.....	\$853.83
		14 ft. 6-in. pipe.....	6.43
		2 hydrants.....	73.00
		1 8-in. gate.....	19.00
		1,436 lbs. lead.....	53.13
		873 lbs. specials.....	17.46
		Pay roll.....	413.30
		Supplies.....	39.39
Total.....			\$1,475.54

Table No. 58.

Showing in Detail Expenditures on Account of Extension No. 462, in Second Ave. S. from E. Twenty-fifth St. to E. Twenty-sixth St.

1889.			
Dec.	3.	464 ft. 6-in. pipe.....	\$302.87
		3 6-in. gates.....	39.90
		500 lbs. lead.....	20.72
		735 lbs. specials.....	14.70
		Pay roll.....	197.13
		Supplies.....	18.64
Total.....			\$508.96

Table No 59.

Showing in Detail Expenditures on Account of Extension No. 464 in Sheridan Ave. from Kenwood Boulevard to W. Twenty-first St.

1889.			
Dec.	3.	1,544 ft. 6-in. pipe.....	\$703.73
		2 ft. 10-in. pipe.....	2.18
		3 hydrants.....	109.50
		1 6-in. gate.....	13.30
		1,264 lbs. lead.....	46.77
		1,292 lbs. special.....	25.84
		Pay roll.....	509.70
		Supplies.....	48.20
Total.....			\$1,459.22

Table No. 60.

*Showing in Detail Expenditures on Account of Extension No. 466 in Second Ave.
N. from Washington Ave. N. to N. Ninth St.*

1889.			
Dec.	3.	2,170 ft. 16-in. pipe.....	\$3,666.00
		59 ft. 6-in. pipe.....	27.07
		6 hydrants.....	219.00
		3 6-in. gates.....	39.90
		3 16-in. gates.....	195.00
		6,042 lbs. lead.....	223.55
		9,067 lbs. specials.....	181.34
		Pay roll.....	909.12
		Supplies.....	81.11
Total			\$5,542.09

Table No. 61.

Showing in Detail Expenditures on Account of Extension No. 467 in W. Twenty-second St. from Kenwood Boulevard to Sheridan Ave.

1889.			
Dec.	3.	607 ft. 6-in. pipe.....	\$276.84
		5 ft. 10-in. pipe.....	4.37
		1 hydrant.....	36.50
		1 6-in. gate.....	13.30
		600 lbs. lead.....	22.20
		930 lbs. specials.....	18.60
		Pay roll.....	202.50
		Supplies.....	18.90
Total			\$593.21

Table No. 62.

Showing in Detail Expenditures on Account of Extension No. 471 in Twenty-sixth Ave. N. from Washington Ave. N. to Lyndale Ave.

1889.			
Dec.	31.	1,588 ft. 12-in. pipe.....	\$1,873.30
		19 ft. 6-inch pipe.....	8.80
		4 hydrants.....	146.00
		3 12-in. gates.....	195.00
		3,088 lbs. lead.....	114.26
		4,055 lbs. specials.....	81.10
		Pay roll.....	467.23
		Supplies.....	54.17
Total			\$2,939.86

Table No. 63.

Showing in Detail Expenditures on Account of Extension No. 473, in Twelfth St. N. from Hawthorne Ave. to First Ave. S.

1889.			
Dec.	3.	2,302 ft. 24-in. pipe.....	\$7,594.17
		52 ft. 6-in. pipe.....	23.83
		7 ft. 8-in. pipe.....	4.93
		7 hydrants.....	255.50
		4 6-in. gates.....	53.20
		1 8-in. gate.....	19.00
		3 24-in. gates.....	624.00
		12,278 lbs. lead.....	454.29
		32,074 lbs. specials.....	641.48
		Pay roll.....	1,399.17
		Supplies.....	91.27
Total.....			\$11,160.84

Table No. 64.

Showing in Detail Expenditures on Account of Extension No. 474, in W. Twenty-fourth St. from Fremont Ave. to Irving Ave.

1889.			
Dec.	3.	1,056 ft. 6-in. pipe.....	\$481.35
		15 ft. 6-in. pipe.....	7.02
		3 hydrants.....	109.50
		1 6-in. gate.....	13.30
		832 lbs. lead.....	50.78
		722 lbs. specials.....	14.44
		Pay roll.....	258.80
		Supplies.....	36.22
Total.....			\$951.41

Table No. 65.

Showing in Detail Expenditures on Account of Extension No. 476, in W. Twenty-fourth St. from Pleasant Ave. to Grand Ave.

1889.			
Dec.	3.	369 ft. 6-in. pipe.....	\$168.09
		1 hydrant.....	36.50
		1 6-in. gate.....	13.30
		392 lbs. lead.....	14.50
		861 lbs. specials.....	17.22
		Pay roll.....	137.93
		Supplies.....	11.84
		Total.....	\$399.38

Table No. 66.

Showing in Detail Expenditures on Account of Extension No. 477, in Fourth Ave. S. from E. Thirty-second St. to E. Thirty-third St.

1889.			
Dec.	3.	601 ft. 6-in. pipe.....	\$273.87
		2 hydrants.....	73.00
		Pay roll.....	160.67
		Supplies.....	21.59
		Total.....	\$529.13

Table No. 67.

Showing in Detail Expenditures on Account of Extension No. 481 in Plymouth Ave. from Second St. to Fourth St.

1889.			
Dec.	3.	1,109 ft. 16-in. pipe.....	\$1,873.88
		3 " 8 " ".....	2.43
		4 " 10 " ".....	4.18
		40 " 6 " ".....	68.41
		8 " 6 " ".....	4.06
		4 16-inch gates.....	260.00
		3,821 lbs. lead.....	141.38
		10,459 " specials.....	209.18
		Pay roll.....	782.60
		Supplies.....	69.68
		Total.....	\$3,415.80

Table No. 68.

Showing in Detail Expenditures on Account of Extension 482 in Aldrich Ave. from W. Twenty-seventh St. to W. Twenty-eighth St.

1889.			
Dec.	3.	612 ft. 6 in. pipe.....	\$279.12
		1 hydrant.....	36.50
		1 6-in. gate.....	13.30
		488 lbs. lead.....	18.06
		511 lbs. specials.....	10.22
		Pay roll.....	140.45
		Supplies.....	19.03
		Total.....	\$516.68

Table No. 69.

Showing in Detail Expenditures on Account of Extension 483 in Twenty-Fifth Ave. S. from Franklin Ave. to E. Twenty-Second St.

1889.			
Dec.	3.	719 ft. 6-in. pipe.....	\$327.79
		1 hydrant.....	36.50
		1 6-in. gate.....	13.30
		544 lbs. lead.....	20.13
		314 lbs. specials.....	6.28
		Pay roll.....	185.12
		Supplies.....	21.67
		Total.....	\$610.79

Table No. 70.

*Showing in Detail Expenditures on Account of Extension No. 484 in Twelfth Ave. N.
from Girard Ave. N. to Emerson Ave. N.*

1889.			
Dec.	3.	764 ft. 6-in. pipe.....	\$348.16
		2 hydrants.....	73.00
		1 6-in. gate.....	13.30
		664 lbs. lead.....	24.57
		911 lbs. specials.....	18.22
		Pay roll.....	288.29
		Supplies.....	25.54
		Total.....	\$791.08

Table No. 71.

*Showing in Detail Expenditures on Account of Extension No. 485 in Clinton Ave.,
from E. Twenty-seventh St., to E. Twenty-eighth St.*

1889.			
Dec.	3.	696 ft. 6-in. pipe.....	\$317.09
		1 hydrant.....	36.50
		1 6-in. gate.....	13.30
		536 lbs. lead.....	19.83
		566 lbs. specials.....	11.32
		Pay roll.....	186.36
		Supplies.....	21.03
		Total.....	\$605.43

Table No. 72.

Showing in Detail Expenditures on Account of Extension No. 486 in E. Twenty-second St., from Twenty-fifth Ave. S. to Twenty-seventh Ave. S.

1889.			
Dec.	3.	908 ft. 6-in. pipe.....	\$414.07
		3 hydrants.....	109.50
		2 6-in. gates.....	26.60
		744 lbs. lead.....	27.53
		794 lbs. specials.....	15.88
		Pay roll.....	201.19
		Supplies.....	32.64
		Total.....	\$827.41

Table No. 73.

Showing in Detail Expenditures on Account of Extension No. 487 in Thirteenth St. S. from First Ave. S. to Third Ave. S.

1889.			
Dec.	3.	620 ft. 12-in. pipe.....	\$731.32
		16 " 6 " ".....	7.61
		2 " 24 " ".....	9.57
		1 6-in. gate.....	13.30
		3 12-in. gates.....	108.00
		1,602 lbs. lead.....	59.27
		6,126 lbs. specials.....	122.52
		Pay roll.....	301.59
		Supplies.....	18.50
		Total.....	\$1,371.68

Table No. 74.

Showing in Detail Expenditures on Account of Extension No. 425 in E. Eighteenth St., from Clinton Ave. to Fourth Ave. S.

1889.			
Dec.	3.	451 ft. 6 in. pipe.....	\$208.21
		1 hydrant.....	36.50
		496 lbs. lead.....	18.35
		880 lbs. specials.....	17.60
		2 6-in. gates.....	26.60
		Pay roll.....	466.31
		Supplies.....	18.28
		Total.....	\$791.85

Table No. 75.

Showing in Detail Expenditures on Account of Extension No. 443 in Knox Ave., from Second Ave. N. to Thirteenth Ave. N.

1889.			
Dec.	3.	299 ft. 6-in. pipe	\$136.23
		1 hydrant	36.50
		256 lbs. lead.....	9.47
		229 lbs. specials.....	4.58
		Pay roll.....	165.27
		Supplies	10.39
Total.....			\$362.44

Table No. 76.

Showing in Detail Expenditures on Account of Extension No. 460 in Rollins St., from Fourth Ave. N. E. to Fifth Ave. N. E.

1889.			
Dec.	3.	172 ft. 6-in. pipe	\$78.39
		2 hydrants.....	73.00
		208 lbs. lead.....	7.70
		549 lbs. specials.....	10.98
		Pay roll.....	102.37
		Supplies	9.65
Total.....			\$282.09

Table No. 77.

Showing in Detail Expenditures on Account of Extension No. 492 in Thirteenth Ave. S. E., from Third St. to Fourth St.

1889.			
Dec.	3.	411 ft. 6-in. pipe	\$183.37
		16-in. gate.....	13.30
		352 lbs. lead.....	13.02
		526 lbs. specials	10.52
		Pay roll.....	168.39
		Supplies.....	11.06
Total.....			\$399.66

Table No. 78.

Showing in Detail Expenditures on Account of Extension No. 495 in Fifth St. S. E., from Fourteenth Ave. to Sixteenth Ave.

1889.			
Dec.	3.	816 ft. 12-in. pipe.....	\$963.30
		13 ft. 6-in. pipe.....	6.24
		8 ft. 12-in. pipe.....	10.26
		2 hydrants.....	73.00
		16-in. gate.....	13.30
		2 12-in. gates.....	72.00
		1,852 lbs. lead.....	68.52
		4,258 lbs. specials.....	85.16
		Pay roll.....	376.41
		Supplies	28.72
Total.....			\$1,696.91

Table No. 79.

Showing in Detail Expenditures on Account of Extension No. 496 in Sixteenth Ave. S. E., from Fourth St. to Fifth St.

1889.			
Dec.	3.	386 ft. 12-in. pipe.....	\$455.94
		1 12-in. gate.....	36.00
		760 lbs. lead.....	28.12
		1,104 lbs. specials.....	22.08
		Pay roll.....	521.19
		Supplies	10.28
Total			\$1,073.61

Table No. 80.

Showing in Detail Expenditures on Account of Extension No. 522 in E. Fourteenth St., from First Ave. S. to Third Ave. S.

1889.			
Dec.	3.	952 ft. 24-in. pipe.....	\$3,139.96
		95 ft. 6-in. pipe.....	43.34
		8 ft. 24-in. pipe.....	27.06
		3 hydrants.....	109.50
		5 6-in. gates.....	66.50
		2 24-in. gates.....	416.00
		5,614 lbs. lead.....	207.72
		17,811 lbs. specials.....	356.22
		Pay roll.....	300.21
		Supplies.....	42.00
Total.....			\$4,708.51

Table No. 81.

Showing in Detail Expenditures on Account of Extension No. 530 in Hiawatha Ave., from E. Twenty-fourth St. to E. Twenty-seventh St.

1889.			
Dec.	3.	2,133 ft. 8-in. pipe.....	\$1,401.64
		28 ft. 6-in. pipe.....	12.81
		4 hydrants.....	146.00
		3 8-in. gates.....	57.00
		2,440 lbs. lead.....	90.28
		1,753 lbs. specials.....	35.06
		Pay roll.....	617.47
		Supplies.....	66.41
Total.....			\$2,426.66

Table No. 82.

Showing in Detail Expenditures on Account of Extension No. 557 in E. Twenty-fourth St., from Cedar Ave. to Hiawatha Ave.

1889.			
Dec.	3.	417 ft. 8-in. pipe.....	\$274.43
		7 ft. 6-in. pipe.....	3.19
		1 hydrant.....	36.50
		1 8-in. gate.....	19.00
		520 lbs. lead.....	19.24
		319 lbs. specials.....	6.38
		Pay roll.....	124.37
		Supplies.....	14.21
Total.....			\$497.32

Table No. 83.

Showing the Total Number of Water Meters, Size and Kind in City January 1, 1890.

Kind.....	$\frac{1}{2}$ in.	$\frac{3}{4}$ in.	1 in.	1 $\frac{1}{2}$ in.	2 in.	3 in.	Total.
Worthington.....	39	45	46	24	17	23	194
Hersey.....	64	30	23	12	4	..	133
Crown.....	4	2	2	..	..	..	8
Royal.....	3	2	..	..	..	..	5
Union Rotary.....	..	1	5	..	..	..	6
Total.....	110	80	76	36	21	23	346

Hydraulic Elevator Registers, 26.

Table No. 84.

Showing the Total Number of Miles of Pipe in Each Ward Approximately.

	Miles.
First ward.....	7.849
Second ward.....	12.566
Third ward.....	19.535
Fourth ward.....	21.778
Fifth ward.....	24.824
Sixth ward.....	6.996
Seventh ward.....	7.434
Eighth ward.....	21.583
Ninth ward.....	8.190
Tenth ward.....	2.785
Eleventh ward.....	7.667
Thirteenth ward.....	.501

Total miles in city.....

141.708

Table No. 85.*Showing in Detail the Cost of City Property in Water Department January 1, 1890.*

Street mains, hydrants and valves.....	\$1,669,089.86
Pump house No. 1, steam plant intake, wheel pits.....	191,434.57
Pump house No. 2.....	88,737.86
Pump house No. 3, pumps, electric plant, intake {	208,965.75
Real estate, boilers, etc..... }	
Distribution pipes, West Side pump house.....	9,487.92
Tunnel, West Side.....	22,000.00
Tunnel, East Side.....	13,318.00
Pump No. 1, West Side pump house, No. 1.....	13,000.00
Pump No. 2, " " " ".....	6,000.00
Pump No. 3, " " " ".....	7,000.00
Pump No. 4, " " " ".....	7,000.90
Pump No. 5, " " " ".....	10,000.00
Pump No. 6, " " " ".....	12,724.51
Pump No. 7, East side pump house, No. 2.....	12,504.00
Material on hand, pipe, lead, hydrants, etc.....	18,016.00
Total.....	\$2,289,277.57

ANNUAL REPORT
OF THE
SUPERVISOR OF WATER WORKS.

MINNEAPOLIS, Minn., Dec. 31, 1889.

To the Honorable Committee on Water Works of the City of Minneapolis:

GENTLEMEN—In compliance with that portion of the prescribed duties of my office, I herewith submit my annual report of this department for official and public information for the year ending December 31, 1889.

The entire works are in good condition and have given good satisfaction during the year.

We have about completed and started our new North Side station. It has so far given good satisfaction and is about ready for official test, less a few minor adjustments.

I would recommend that the grounds at the station owned by the city be levelled and beautified; also another road be made to get to station, as we have no roadway there now that is public.

We have laid mains the past year of six-inch, 14,793.7; eight-inch, 6,111.1; twelve-inch, 10,435.9; sixteen-inch, 11,785.5; twenty-four-inch, 12,418 feet, making a total of 10 miles 2,754 feet, and 115 fire hydrants set, and have replaced twenty-four flush and low hydrants with five-foot post hydrants.

The total amount of pipe in the city laid is 148 miles, 1,011 feet and 1,795 fire hydrants set; also 240 sprinkling hydrants, which makes our system as complete as any city of our size in the country.

The accompanying detailed tables give your honorable body a correct idea of all work done and property owned by this department. In conclusion I would sincerely thank the honorable committee for the kind and courteous treatment received at their hands; also thanking my fellow officers and men, in kindly assisting me to make the department run so smooth and well.

Respectfully submitted,

J. H. McCONNELL, *Supervisor.*

Table No. 1.

Showing in Detail Record of Pumps Nos. 1, 2, 3, 4, 5 and 6, from January 1, 1889, to January 1, 1890.

TABLE SHOWING RECORD OF PUMP NO. 1 (West Side).

MONTHS.	TIME IN OPERATION.		Press're.	Total gallons pumped.	TIME IN OPERAT'N.		Press're.	Increase during fire.
	Hrs.	Min.			Hrs.	Min.		
January	587	35	75	30,620,382	10	35	75	.....
February	452	15	75	32,605,274	22	45	78	78,650
March.....	247	25	75	18,216,900	5	.....	.....	.....
April	132	.....	75	8,486,114	4	30	75	7,120
May.....	.....	.....	.....	.....	.....	.....	.....	.....
June.....	21	15	75	1,088,742	.....	25	80	.....
July.....	194	25	75	9,903,842	9	12	80	5,070
August.....	179	.....	75	14,868,906	.....	85	80	.....
September.....	145	10	75	7,699,770	1	12	80	.....
October	135	20	75	7,775,560	7	22	80	15,600
November.....	225	30	75	13,296,114	4	30	80	3,120
December.....	.....	.....	.....	.....	.....	.....	.....	.....
Total....	2,310	55	75	144,561,604	175	6	79.1	109,560

TABLE SHOWING RECORD OF PUMP NO. 2 (West Side.)

MONTHS.	TIME IN OPERATION.		Press're.	Total gallons pumped.	TIME IN OPERAT'N.		Press're.	Increase during fire.
	Hrs.	Min.			Hrs.	Min.		
January	587	35	75	47,008,280	10	35	75	.....
February	452	15	75	50,161,960	22	45	78	121,000
March.....	274	25	75	28,026,000	5	.....	78	.....
April	132	.....	75	13,055,560	4	30	75	10,800
May.....	.....	.....	.....	.....	.....	.....	.....	.....
June.....	21	15	75	1,982,680	.....	25	80	.....
July.....	194	25	76	15,236,680	9	12	80	7,800
August.....	179	.....	75	22,875,240	.....	85	80	.....
September.....	145	10	75	11,844,800	1	12	80	.....
October	135	20	75	11,962,400	7	22	80	24,000
November.....	225	30	75	20,455,560	4	30	80	4,800
December.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	2,346	35	75	222,609,160	68	14	78.6	168,400

TABLE SHOWING RECORD OF PUMP NO. 3 (West Side.)

MONTHS.	TIME IN OPERATION.		Press're.	Total gallons pumped.	TIME IN OPERAT'N.		Press're.	Increase during fire.
	Hrs.	Min.			Hrs.	Min.		
January	237	40	75	14,156,400	11	15	75	.....
February.....	162	25	75	15,592,000	5	50	76	92,800
March.....	17	30	75	1,784,800	.....	10	65	.....
April	620	50	75	29,183,400	20	10	75	.....
May	569	5	75	27,656,480	11	15	80	9,600
June.....	675	40	75	32,450,820	21	5	80	84,000
July.....	687	50	75	36,218,640	26	12	80	53,200
August.....	732	45	75	37,496,660	10	15	80	11,200
September.....	699	00	75	55,887,100	22	00	80	31,600
October	689	10	75	21,846,060	28	20	80	50,600
November.....	303	30	75	13,206,080	4	40	80	9,600
December.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	5,431	25	75	285,478,440	155	12	77.4	342,600

Table No. 1—Continued.

TABLE SHOWING RECORD OF PUMP NO. 4 (West Side).

MONTHS.	TIME IN OPERATION.		Press're.	Total gallons pumped.	TIME IN OPERAT'N.		Press're.	Increase during fire.
	Hrs.	Min.			Hrs.	Min.		
January.....	460	28	75	26,898,220	11	15	75	2,400
February.....	479	20	75	30,947,400	13	40	76	156,800
March.....	714	35	75	46,175,000	12	15	78	11,200
April.....	441	20	75	18,968,160	8	50	75	.....
May.....	569	05	75	27,656,480	11	15	80	9,600
June.....	675	40	75	32,450,820	21	5	80	84,000
July.....	687	50	75	36,218,640	26	12	80	53,200
August.....	732	45	75	37,496,660	10	15	80	11,200
September.....	699	.....	75	55,887,100	22	.....	80	31,600
October.....	152	15	75	13,999,760	12	15	80	28,400
November.....	.....	.....	.....	.....	.....	.....	.....	.....
December.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	5,612	18	75	327,696,240	149	2	78.4	378,400

TABLE SHOWING RECORD OF PUMP NO. 5 (West Side).

MONTHS.	TIME IN OPERATION.		Press're.	Total gallons pumped.	TIME IN OPERAT'N.		Press're.	Increase during fire.
	Hrs.	Min.			Hrs.	Min.		
January.....	584	.....	75	85,670,415	12	.....	76	49,450
February.....	504	45	75	69,491,788	19	40	76	60,080
March.....	182	15	75	31,399,425	3	35	80	16,900
April.....	663	30	75	134,565,785	23	15	80	581,110
May.....	399	10	75	76,423,116	6	45	80	44,165
June.....	394	35	75	82,081,149	18	5	80	91,250
July.....	483	20	75	105,256,235	23	47	80	529,120
August.....	477	40	75	99,594,795	4	45	80	32,120
September.....	394	18	75	102,295,490	10	50	80	60,500
October.....	542	30	75	68,618,073	23	5	80	33,980
November.....	359	00	75	35,287,064	4	35	80	4,740
December.....	.....	.....	75	.....	.....	.....	.....	.....
Total.....	4,985	3	75	769,450,335	149	42	79.8	1,550,500

TABLE SHOWING RECORD OF PUMP NO. 6.—(West Side.)

MONTHS.	TIME IN OPERATION.		Press're.	Total Gallons Pumped.	TIME IN OPERAT'N.		Press're.	Increase during fire.
	Hrs.	Min.			Hrs.	Min.		
January.....	62	5	75	7,456,640	.....	15	.....	.....
February.....	51	30	75	10,570,432	.....	10	.....	1,600
March.....	571	.....	.....	113,430,060	11	20	80	32,800
April.....	157	15	75	28,422,000	5	50	80	.....
May.....	516	55	75	78,788,400	10	30	80	47,600
June.....	631	25	75	105,976,000	17	50	80	161,000
July.....	641	20	75	102,828,320	25	12	80	647,600
August.....	659	15	75	110,276,400	10	40	80	28,000
September.....	572	45	75	128,536,600	18	.....	80	140,000
October.....	613	10	75	95,284,530	10	.....	80	323,870
November.....	386	40	75	50,546,884	6	15	80	65,280
December.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	4,863	20	75	832,116,266	116	2	80	1,448,350

Table No. 2.

Showing Record of Pump No. 7 (East Side Pumping Station) from January 1, 1889, to January 1, 1890.

MONTHS.	TIME IN OPERATION.		Press' re.	Total gallons pumped.	TIME IN OPERAT'N.		Press' re.	Increase during fire.
	Hrs.	Min.			Hrs.	Min.		
January	731	.....	80	150,134,800	11	35	81	.....
February	644	15	78	129,525,320	23	35	81	.....
March.....	710	50	84	134,180,400	12	35	84	.....
April	691	5	86	113,874,600	22	20	86	214,400
May.....	718	30	85	133,851,600	.....	.....	.....	.....
June.....	706	35	85	159,253,000	13	25	85	64,400
July.....	715	10	86	196,438,200	26	35	82	.....
August.....	731	10	87	202,720,060	9	5	89	.....
September.....	698	55	88	182,609,400	21	25	86	205,600
October.....	671	20	88	176,366,320	29	40	90	.....
November.....	464	45	90	113,001,720	7	35	90	.....
December.....	628	10	80	63,924,220	30	.....	80	.....
Total.....	8,111	45	85	1,755,879,640	207	50	85	484,400

Table No. 2½.

Showing Record of Pump Nos. 8 and 9 (North Minneapolis Station) from November 1, 1889, to January 1, 1890.

MONTHS.	TIME IN OPERATION.		Total gallons pumped.	Coal consumed—lbs.
	Hrs.	Min.		
November.....	284	5	111,214,600	372,613
December.....	744	.....	271,564,900	900,577
Total	1,028	5	382,779,500	1,273,190

Total number of gallons pumped at West Side pumping station, from January 1, 1889, to January 1, 1890.....	2,581,912,045
Total number gallons pumped at East Side pumping station from January 1, 1889 to January 1, 1890.....	1,755,879,640
Total number gallons pumped at North Side pumping station from November 1, 1889, to January 1, 1890.....	382,779,500
Daily average in gallons, West Side.....	7,073,731
Daily average in gallons, East Side.....	4,810,629
Daily average in gallons, North side.	6,273,434
Daily average in city.....	12,933,072
Cost of pumping 1,000,000 gallons, West Side.....	\$85.71
Cost of pumping 1,000,000 gallons, East Side.....	\$3.13
Cost of pumping 1,000,000 gallons, North Side.....	\$13.14
Total number gallons pumped in city from January 1, 1889 to January 1, 1890..	4,720,571,185

Table No. 3.

Showing in Detail Length and Size of Mains January 1, 1890.

IN—	FROM—	TO—	6-inch.	8-inch.	10-inch.	12-inch.	16-inch.	24-inch.	36-inch.
First st. N.	Fourth av. N.	Plymouth av.	2,476.						
First st. N.	Third av. N.	Fourth av. N.	303.5						
First st. N.	Third av. N.	Fourth av. N.	468.						
Second st. N.	Hennepin av.	Third av. N.	1,225.5						
Second st. N.	Plymouth av.	Twentieth av. N.					2,509.1	81.5	1,565.7
Second st. N.	Twentieth av. N.	Twenty-fourth av. N.							10,538.8
Second st. N.	Hennepin av.	Shingle creek T. S.							
Third st. N.	Hennepin av.	Third av. N.					1,289.		
Third st. N.	Third av. N.	Sixth av. N.					1,285.	2,844.3	
Third st. N.	Sixth av. N.	Sixth av. N.							
Fourth st. N.	Sixth av. N.	Eighth av. N.	744.						
Fourth st. N.	Present terminus.	Plymouth av.	2,397.						
Fourth st. N.	Plymouth av.	Fifteenth av. N.	824.						
Fourth st. N.	Fifteenth av. N.	Sixteenth av. N.	384.						
Fourth st. N.	First av. N.	Third av. N.	787.1						
Fourth st. N.	Hennepin av.	First av. N.	411.1						
Fourth st. N.	Sixteenth av. N.	Twentieth av. N.	1,432.						
Fourth st. N.	Twentieth av. N.	Twenty-first av. N.	369.1						
Fifth & sixth sts. N.	Fourth av. N.	Plymouth av.	4,323.						
Fifth st. N.	First av. N.	Fourth av. N.	1,367.						
Sixth st. N.	Hennepin av.	First av. N.	417.1						
Sixth st. N.	Thirteenth av. N.	Sixteenth av. N.	1,193.4						
Eighth st. N.	Hennepin av.	First av. N.	580.				770.8		
Second av. N.	Seventh st. S.	Eighth st. S.							
Tenth st. N.	Hennepin av.	First av. N.	790.						
Eleventh st. N.	Western av.	Western av.	362.						
Eleventh st. N.	Chestnut av.	First av. N.	579.9						
Twelfth st. N.	Hawthorne av.	Linden av.	122.						
Twelfth st. N.	Western av.	Royalston av.	90.						
Twelfth st. N.	Linden av.	Chestnut av.	351.1					234.	
Twelfth st. N.	Hawthorne av.	First av. S.							
Fourteenth st. W.	Willow st.	Spruce place.	228.9						
Fourteenth st. W.	First av. S.	Third av. S.							
Fourteenth st. E.	First av. S.	Stevens av.		313.				964.4	
Nineteenth st. N.	Fourth av. N.	Sixth av. N.		357.2					
Nineteenth st. N.	Vine place.	Lindley av.	1,023.						
Franklin av. W.	Nicollet av.	Lyndale av.				2,594.6			
Twenty-second st. W.	Twenty-fifth av. S.	Twenty-seventh av. S.	892.3						
Twenty-second st. W.	Kenwood boulevard	Sheridan av.	607.2						
Twenty-fifth st. W.	Pleasant av.	Grand av.	327.2						
Twenty-fifth st. W.	Fremont av.	Irving av.	1,060.2						

[illegible]

Table 3—Continued.

IN—	FROM—	TO—	6-inch.	8-inch.	10-inch.	12-inch.	16-inch.	24-inch.	36-inch.
Pleasant av.	W. Twenty-fourth st.	Twenty-fourth st.	1,280.	1,303.3					
Grand av.	Franklin	Franklin	621.8						
Grand av. S.	Lake st.	Twenty-fourth st.	1,275.3						
Harriet av.	Franklin st.	Twenty-third st.		5,253.9					
Garfield av.	Twenty-fifth st.	Twenty-seventh st.	641.8						
Washington av.	Twenty-sixth st.	Nineteenth av. S.	2,001.	2,653.	5,187.	4,704.			
Washington av.	Twentieth av. N.	Thirtieth av. N.		4,194.8					
Washington av.	Nineteenth av. S.	Twenty-first av. S.	752.8						
Washington av.	across	Bassett's creek		494.3				1,047.3	
First st. S.	Twelfth st.	Fourteenth st.					214.		
First st. N.	Fourth av. S.	Pump house							
First st. N.	Second av. S.	Third av. N.	2,104.				268.		
First st. S.	Pump house	Bassett's mill					2,111.		
First st. S.	Pump house	Hennepin av.					405.		
Second st. S.	Third av. S.	Fourth av. S.					2,478.		
2½ st. S.	Fifth av. S.	Eleventh av. S.					1,633.		
Third st.	Cedar av.	Twentieth av. S.	809.					772.	
Third st.	Hennepin av.	Third av. S.							
Third st.	Third av. S.	Fifth av. S.	2,057.5						
Third st.	Sixth av.	Eleventh av.	2,053.7						
Third st.	Eleventh av. S.	Cedar av.		475.8					
Fourth st.	Hennepin av.	Nicollet av.		859.					
Fourth st.	Nicollet av.	Second av. S.	1,610.						
Fourth st.	Second av. S.	Sixth av. S.					2,300.7		
Fourth st.	Eleventh av. S.	Cedar av.	1,632.9						
Fourth st.	Sixth av. S.	Twentieth av. S.							
Fourth st.	Twenty-first av. S.	Twenty-fifth av. S.				2,045.8			
Fifth st.	Hennepin av.	Nicollet av.	588.				1,941.8		
Fifth st.	Second av. S.	Third av. S.		348.9					
Fifth st.	Sixth av. S.	Eleventh av. S.	2,108.						
Fifth st.	Eleventh av. S.	Cedar av.				2,511.5			
Fifth st.	Nineteenth av. S.	Eighteenth av. S.	1,349.			400.			
Fifth st.	Nicollet av.	Twenty-second av. S.		896.					
Sixth st.	Nicollet av.	Second av. S.			209.				
Sixth st.	Center Block 87	Center Block 87			615.				
Sixth st.	Second av. S.	Third av. S.			373.				
Sixth st.	Third av. S.	Sixth av. S.							
Sixth st.	Sixth av.	Eleventh av.							
Sixth st.	Hennepin av.	Nicollet av.	671.2						
Sixth st.	Eleventh av. S.	Cedar av.		775.		1,227.			
Seventh st. S.	Hennepin av.	Nicollet av.		892.		2,103.4			
Seventh st. S.	Nicollet av.	Second av. S.				2,709.7			

Seventh st. S	Second av. S	Tenth av. S	3,362.						
Seventh st. S	Tenth av. S	Thirteenth av. S	420.						
Seventh st. S	Thirteenth av. S	Fourteenth av. S	825.7						
Seventh st. S	Fourteenth av. S	Fifteenth av. S	400.5						
Seventh st. S	Twentieth av. S	Twenty-first av. S	419.9						
Seventh st. S	Nicollet av.	Third av. S	1,286.3						
Eighth st. S	Sixth av. S	Seventh av. S				410.2			
Eighth st. S	Sixteenth av. S	Sixteenth av. S				2,051.			
Eighth st. S	Minnehaha av.	Twenty-second av. S				1,636.			
Eighth st. S	Twenty-first av. S	Eleventh av. S	370.5						
Eighth st. S	Fifth av. S	Sixth av. S						380.9	
Eighth st. S	Hennepin av.	Nicollet av.	925.5					1,644.	
Eighth st. S	Hennepin av.	Nicollet av.				824.1			
Ninth st. S	Hennepin av.	Nicollet av.	985.8						
Ninth st. S	Nicollet av.	Second av. S	890.						
Ninth st. S	Second av. S	Sixth av. S	1,098.						
Ninth st. S	Eleventh av. S	Thirteenth av. S	586.7						
Tenth st. S	Hennepin av.	Chicago av.	3,556.						
Tenth st. S	Portland av.	Eleventh av. S						1,043.	
Tenth and 14th st. S	Sixth av. S	Harmon place.	1,788.5			733.5			
Eleventh st. S	Harmon place	Nicollet av.	386.						
Eleventh st. S	Nicollet av.	First av. S	889.						
Eleventh st. S	Third av. S	Fourth av. S	393.6						
Eleventh st. S	Fourth av. S	Fifth av. S	368.2						
Twelfth st. S	Second av. S	Clinton av.	697.3						
E. Grant st. S	Second av. S	Third av. S						310.3	
Fifteenth st. S	Nicollet av.	Spruce place.	748.						
Fifteenth st. S	Third av. S	Fifth av. S	950.3						
Fifteenth st. S	Portland av.	Park av.	659.5						
Willow st. S	Harmon place	W. Fourteenth st.	1,387.4						
Seventeenth st. S	Portland	Park av.	659.1						
Seventeenth st. S	Park av.	Chicago av.	668.						
Nineteenth st. S	Fifteenth av. S	Sixteenth av. S	613.9						
Franklin av. S	Nicollet av.	Twenty-fifth av. S	2,885.			8,075.			
Twenty-fourth st. S	Nicollet av.	Sixth av. S	2,632.						
Twenty-fourth st. S	Portland av.	Cedar av.				4,941.2			
Twenty-fifth st. S	Six and one-half av.	Park av.				401.5			
Twenty-fifth st. S	Minnehaha av.	Sixth av. S	2,655.						
Twenty-sixth st. S	Nicollet av.	Twenty-ninth av. S				2,725.9			
Twenty-seventh st. S	Bloomington	Chicago av.						2,639.3	
Twenty-eighth st. S	Chicago av.	Hennepin av.						2,651.	
Lake st. E	Third av. S	Ninth av. S						6,550.2	
Lake st. E	Twenty-seventh av. S	Fort av.						345.7	
Thirty-first st. E	Third av. S	Portland av.	332.7					1,982.7	
Thirty-third st. E	Western av.	Eight st.	412.0						
First av. N	First av. N	M. & St. Louis r'd h.	1,903.					1,326.0	

Table No. 3—Continued.

IN—	FROM—	TO—	6-inch.	8-inch.	10-inch.	12-inch.	16-inch.	24-inch.	36-inch.
West. av. & 1st av. N.	Washington av.	Railroad.							
Western av.	East of R. R. bridge.	Morgan av.		742.					
Second av. N.	Morgan av.	Russell		5,657.1					
Second av. N.	Second st. N.	Washington av.		1,672.5					
Third av. N.	Washington av. N.	Ninth st. N.					437.4		
Third av. N.	First st. N.	Washington av.	860.				2,191.		
Third av. N.	Fifth st. N.	Sixth st. N.	402.						
Third av. N.	Third st. N.	Washington av.	1,245.1						
Third av. N.	Washington av.	Second st.	439.7						
Fourth av. N.	First st. N.	East of O. track.		643.5					
Sixth av. N.	Washington av.	Emerson av.	4,289.	841.					
Sixth av. N.	Emerson av.	James av.	1,644.9						
Seventh av. N.	Washington av.	Fourth st.	852.4						
Eighth av. N.	Fifth st.	Bradford	842.6						
Eighth av. N.	Fifth st.	Lyndale av.	1,500.3						
Eighth av. N.	Fremont	Grand av.		385.8					
Eighth av. N.	Girard	Elwood av.		1,119.5					
Eleventh av. N.	Elwood ave.	Logan av.	415.6						
Eleventh av. N.	Emerson av.	Fremont av.	405.6						
Eleventh av. N.	Fifth st. N.	Emerson av.	2,053.2						
Twelfth av. N.	Girard av.	Emerson av.	753.3						
Plymouth av.	Sixth av. N.	Lyndale		332.8					
Plymouth av.	River	Sixth st.	5,005.	421.	703.		1,130.3		
Fifteenth av. N.	Washington av. N.	First st. N.	333.2						
Fifteenth av. N.	Washington av.	Third st.	333.1						
Sixteenth av. N.	Dupont av.	Emerson av.	429.5						
Sixteenth av. N.	Fourth st. N.	Dupont av.	2,156.5						
Eighteenth av. N.	Second st. N.	First st. N.	401.7						
Twentieth av. N.	Washington av. N.	James av.		4,939.					
Twentieth av. N.	Washington av. N.	Second st.					399.7		
Twentieth av. N.	Second st.	First st.							
Twentieth av. N.	West shore.	East shore.						410.	
Twentieth av. N.	Second st.	River						862.7	
Twenty-sixth av. N.	Washington av.	Second st. N.				407.		601.7	
Twenty-sixth av. N.	Hennequin av.	Lyndale av.				1,063.8			
Laurel av.	Lyndale av.	Lyndale av.	1,350.						
Laurel av.	Lyndale av.	Collfax av.	959.7						
Laurel av.	Twelfth st.	Valley av.	1,250.						
Royalston av.	Royalston av.	Highland av.	362.						
Valley av.	Royalston av.	Royalston av.	2,599.						
Highland av.	Laurel av.	Lyndale av.	991.						
Hawthorn av.	Twelfth st.	Twentieth st.							
Hawthorn av.	Tenth st.	Twelfth st. N.					785.2	1,866.7	
Hawthorn av.	Ninth st.	Tenth st.					330.7		
Linden av.	Lyndale av.	Aldrich av.	328.5						

Linden av.....	Twelfth st.....	Aldrich av.....	1,718.3				
Chestnut av.....	Eleventh st.....	Fifteenth st.....	1,008.2				
Morgan av.....	Western av.....	Fourth av. N.....	257.				
Erie av.....	Lyndale av.....	Hennepin av.....	409.1		1,165.		
Lyndale av.....	Western av.....	Higland av.....					
Lyndale av.....	Twenty-sev'th st. N.....	Lake st. N.....		1,938.2			
Lindley av.....	Nineteenth st. N.....	Ridgewood av.....		186.5			
Lindley av.....	West Lake.....	Thirty-second st.....	1,348.3				
Ridgewood av.....	Lindley av.....	Lyndale av.....		1,810.			
Groveland av.....	Hennepin av.....	Hillside place.....		1,100.			
Hillside place.....	Groveland av.....	Mount Curve av.....		422.5			
Mount Curve av.....	Hillside place.....	Lake View av.....		1,801.6			
Lakeview av.....	Mount Curve av.....	Newton av.....		1,794.			
Kenwood boulevard	Newton and Lakeview av.						
Kenwood boulevard	Oliver av.....	L. of the Isles boulev.			681.7		
Vine place.....	Oak Grove st.....	W. Nineteenth st.....			3,076.		
Vine place.....	Nineteenth st.....	Franklin.....	700.8				
Harmon place.....	Eleventh st.....	Sixteenth st.....	563.5				
Harmon place.....	Sixteenth st.....	Hennepin av.....	1,913.				
Spruce place.....	Fourteenth st.....	Fifteenth st.....		546.			
Clifton av.....	Vine place.....	Clifton place.....	434.				
Clifton place.....	Clifton av.....	Groveland av.....	1,871.4				
Queen av.....	Kenwood.....	Twenty-first st.....	215.3				
Nicollet av.....	First st.....	Thirty-second st.....	834.1				
First av. S.....	Center block 64.....	Seventh st.....	13,841.	13,243.			
First av. S.....	Washington av.....	Second st.....	1,396.				
First av. S.....	Washington av.....	Center block 64.....	455.				
First av. S.....	Seventh st.....	Tenth st.....	905.5				
First av. S.....	E. Twenty-second st.....	E. Twenty-fourth st.....	1,245.5				
First av. S.....	E. Twenty-fourth st.....	E. Thirty-third st.....	578.4				
First av. S.....	Twelfth st. S.....	Fourth st.....	5,800.9				
Stevens av.....	E. Seventeenth st.....	E. Twenty-fourth st.....	2,224.8		1,047.3		
Stevens av.....	E. Sixteenth st.....	E. Seventeenth st.....	342.				
Stevens av.....	E. Twenty-third.....	E. Thirty-third st.....	6,172.1				
Stevens av.....	First st. S.....	Second st. S.....	376.				
Grand st. and Stevens av.....	Washington av.....	Thirteenth st. S.....	4,487.				
Second av. S.....	Franklin av.....	Sixteenth st. S.....	1,190.				
Second av. S.....	E. Grand st.....	Twenty-second st.....	601.				
Second av. S.....	E. Sixteenth st.....	E. Seventeenth st.....	966.4				
Second av. S.....	Seventeenth st.....	E. Sixteenth st.....	345.8				
Second av. S.....	Twenty-sixth st.....	Eighteenth st.....	388.				
Second av. S.....	E. Twenty-seventh.....	Twenty-seventh st.....	613.				
Second av. S.....	E. Lake st.....	E. Twenty-eighth st.....	612.7				
Second av. S.....	E. Twenty-fifth st.....	Thirty-third st.....	1,843.				
Third av. S.....	E. Twenty-second st.....	E. Twenty-sixth st.....	1,555.9				
Third av. S.....	Lake st.....	Lake st.....					7,111.
Third av. S.....	E. Thirty-third st.....	E. Thirty-third st.....					4,605.6
Third av. S.....	Thirtieth st.....	E. Thirty-eighth st.....					1,914.9
Clinton av. S.....	Grand st.....	E. Twenty-fourth st.....		3,816.9			3,398.1

Table No. 3—Continued.

IN—	FROM—	TO—	6-inch.	8-inch.	10-inch.	12-inch.	16-inch.	24-inch.	36-inch.
Clinton av.	E. Twenty-fifth st.	E. Twenty-sixth st.	618.1						
Clinton av.	Twenty-sixth st.	Twenty-seventh st.	680.3						
Clinton av.	E. Thirty-first st.	E. Thirty-second st.	561.8						
Clinton av.	E. Twenty-seventh	E. Twenty-eighth st.	716.7						
Fourth av. S.	E. Thirty-second st.	E. Thirty-third st.	506.7						
Fourth av. S.	First st.	Second st.					374.		
Fourth av. S.	Washington av.	Sixth st.	1,631.						
Fourth av. S.	Sixth st.	Tenth st.	1,644.1						
Fourth av. S.	Tenth st.	Twenty-fourth st.	4,635.				418.		
Fourth av. S.	E. Twenty-fifth st.	E. Twenty-sixth st.	715.5						
Fourth av. S.	E. Twenty-fifth st.	Washington av.	617.1						
Fourth av. S.	First st. S.	Third st.					795.	1,150.	
Fifth av. S.	Pump house.	Ninth st.						3,723.	
Fifth av. S.	Pump house.	Ninth st.						3,081.2	
Fifth av. S.	Nineteenth st.	Nineteenth st.							
Sixth av. S.	E. Nineteenth st.	E. Twenty-fifth st.				1,690.6			
Portland av.	First st. S.	E. Lake st.				10,284			
Portland av.	E. Twenty-fifth st.	E. Lake st.				1,942.6			
Portland av.	E. Lake st.	E. Thirty-third st.		1,912.0					
Seventh av. S.	Washington av.	Third st.	462.5						
Seventh av. S.	Washington av.	Tenth st.	1,594.						
Seventh av. S.	Sixth st.	Twenty-sixth st.	5,283.						
Seventh av. S.	E. Twenty-sixth st.	E. Twenty-seventh st.	693.2						
Park av.	E. Twenty-sixth st.	E. Twenty-seventh st.	1,966.2						
Eighth av. S.	E. Twenty-seventh st.	E. Lake st.	848.						
Eighth av. S.	Washington av.	Fourth st. S.	2,411.3						
Eighth av. S.	Fourth st.	Tenth st.							
Eighth av. S.	Tenth st.	E. Lake st.		7,423.9					
Ninth av. S.	Fourth st.	Franklin av.		2,276.1					
Ninth av. S.	E. Twenty-eighth st.	Franklin av.	1,226.1						
Ninth av. S.	Franklin	Twenty-second st.	619.7						
Ninth av. S.	Twenty-fourth st.	Twenty-fifth st.	611.2						
Tenth av. S.	Second av. S.	Lower bridge	557.3						
Tenth av. S.	E. Fourteenth st.	E. Franklin av.	2,236.8						
Eleventh av. S.	Second st.	E. Twenty-fifth st.				6,666.6			
Twelfth av. S.	E. Twenty-fifth st.	E. Twenty-sixth		1,360.7					
Thirteenth av. S.	Washington av.	E. Franklin av.		4,665.8					
Fourteenth av. S.	Washington av.	Bluff st.	1,315.						
Fourteenth av. S.	Eighth st. S.	Thirteenth st.	1,074.						
Fourteenth av. S.	E. Twenty-sixth st.	E. Twenty-seventh st.		298.3					
Fourteenth av. S.	Twenty-sixth st.	E. Lake st.		2,263.3					
Fourteenth av. S.	E. Eighth st.	E. Franklin av.							
Fifteenth av. S.	Washington av.	Fourth st.	921.9						
Fifteenth av. S.	Fifth st. S.	Fifth st. S.	839.3						
Fifteenth av. S.	Fourth st. S.	Fifth st. S.	373.	1,257.4					
Fifteenth av. S.	Eighth st. S.	E. Franklin av.		1,803.					

Bloomington av.	E. Franklin av.	E. Twenty-eighth st.	3,826.3			
Bloomington av.	Twenty-eighth st.	Lake st.	1,306.3			
Sixteenth av. S.	Eighth st. S.	E. Franklin av.	1,467.			
Sixteenth av. S.	E. Franklin av.	E. Twenty-second st.	616.1			
Seventeenth av. S.	Franklin av.	E. Twenty-eighth st.	3,893.2			
Eighteenth av. S.	Washington av.	Twenty-fourth st.	1,122.			
Cedar av.	Cedar av.	Second st.	292.8			
Cedar av.	Fifth st. S.	Franklin av.	2,280.1			
Cedar av.	Twenty-eighth st.	Thirty-fourth st.	3,894.5			
Cedar av.	Washington av.	Fifth st.	4,030.6			
Cedar av.	E. Franklin av.	E. Twenty-eighth st.				
Nineteenth av. S.	Fifth st.	Seventh st. S.	845.1			
Nineteenth av. S.	Eight st.	Seventh st.	471.5			
Twentieth av. S.	Washington av.	Twenty-first av.	1,149.3			
Twentieth av. S.	Fifth st. S.	E. Franklin av.	2,323.5			
Twentieth av. S.	Fifth st. S.	Riverside av.	234.1			
Twenty-second av. S.	Riverside av.	E. Franklin av.	1,777.5			
Twenty-fifth av. S.	Riverside av.	Franklin av.	1,017.8			
Twenty-fifth av. S.	Franklin av.	Eighth av. S.	691.5			
Twenty-seventh av. S.	E. Twenty-fifth st.	E. Lake st.	3,254.3			
Minnehaha av.	Nineteenth st.	Car Shops.	3,645.			
Fort av.	E. Lake st.	E. Twenty-seventh st.	2,180.6			
Hennepin av.	Under R.R.		149.3			
Hennepin av.	Twenty-fifth st.	Thirty-third st.	5,641.6			
Hennepin av.	River.	Twenty-fifth st.	3,762.2			
Nicollet Island.	West Bank.	East Bank.	846.			
Nicollet Island.	East Bank.	River.	120.			
Nicollet Isl'd tun I.	Present terminus.	St. P. M. & M. R. R.	104.			
Island av. in tun I.			1,120.2			
West Channel.	West bank.	East bank.	1,683.7			
East Channel.	West bank.	East bank.				
Wildor st.	Central av.	342 feet south.	342.			
Central av.	Main st.	Third av. N. E.	731.			
Third av. N. E.	Fifth st.	Harrison st.	284.			
Fourth av. N. E.	Main st. N. E.	Third av. N. E.	1,294.3			
Sixth av. N. E.	Marshall st.	Main st. N. E.	801.			
Eighth av. N. E.	Third av. N. E.	Sibley st.	2,058.8			
Eleventh av. N. E.	Sibley st.	Main st. N. E.	1,191.1			
Thirteenth av. N. E.	Marshall st.	Main st. N. E.				
Thirteenth av. N. E.	East shore of river.	Marshall st. N. E.				
Thirteenth av. S. E.	Jefferson st.	Monroe	638.5			
Thirteenth av. S. E.	Third st. S. E.	Fourth st. S. E.	413.1			
Fourth av. S. E.	Fourth st. S. E.	Como av.	2,920.3			
Fourth av. S. E.	Monroe	Harrison	1,284.7			
Spring st. N. E.	Harrison	Pierce st. N. E.	493.5			
Spring st. N. E.	Present terminus.	Fourth st.	1,160.7			
Third av. S. E.	Main st.	Division st.	334.			
Third av. S. E.	Fourth st.	Fifth st. S. E.	389.			
Fifth av. S. E.	Fourth st. S. E.	Tenth st. S. E.	1,288.5			
Seventh av. S. E.	Fifth st. S. E.	Eighth st. S. E.	1,221.			
Ninth av. S. E.	Seventh st. S. E.	Across Railroad.	1,125.			

Table No. 3—Continued.

IN—	FROM—	TO—	6-inch.	8-inch.	10-inch.	12-inch.	16-inch.	24-inch.	36-inch.
Thirteenth av. S. E.	Sixth st.	Seventh st.	439.						
Fourteenth av. S. E.	Fourth st.	Como av.	1,304.						
Fifteenth av. S. E.	Fifth st.	University grounds	1,222.5	481.					
Fifteenth av. S. E.	Fifth st.	Como av.	830.6						
Fifteenth av. S. E.	Como av.	Delaware	701.1						
Fifteenth av. S. E.	Como av.	Talmadge	625.1						
Sixteenth av. S. E.	Talmadge	Division	670.6						
Sixteenth av. S. E.	Como av.	Talmadge	622.6						
Sixteenth av. S. E.	Fourth st. S. E.	Fifth st. S. E.				382.			
Sixteenth av. S. E.	University av. S. E.	Fourth st. S. E.	621.2			380.			
Tuttle st. S. E.	Como av.	Talmadge	368.1						
State st. S. E.	Beacon	Cambridge							
Marshall av. S. E.	Fourth st.	St. P., M. & M. R. R.				2,416.9			
Prospect st. S. E.	Fourth st.	Cambridge st.				1,299.			
Mah st. S. E.	Cambridge	Dump	599.7	360.					
Second st. S. E.	Second av. S. E.	Third av. S. E.							
University av. S. E.	Central av.	Bank st.	497.5			1,449.			
Fourth st. S. E.	Central av.	Sixteenth av. S. E.	5,020.			5,782.5			
Fourth st. S. E.	Central av.	Fourteenth av. S. E.				1,718.			
Fifth st. S. E.	Sixteenth av. S. E.	Oak st.				1,864.1			
Fifth st. S. E.	Central av.	Fifth av.	3,685.5						
Fifth st. S. E.	Fourth av. S. E.	Fourteenth av. S. E.				828.2			
Sixth st. S. E.	Fourth av. S. E.	Fifteenth av. S. E.	3,854.						
Sixth st. S. E.	Central av.	Tenth av. S. E.	1,092.						
Sixth st. S. E.	Central av.	Fifteenth av.	399.4						
Sixth st. S. E.	Fifteenth av.	Sixteenth av.	659.3						
Seventh av. S.	E. Twenty-sixth st.	E. Twenty-seventh st.	1,956.2						
Seventh av. S.	E. Twenty-sixth st.	E. Lake st.	848.						
Seventh av. S.	Washington av.	Fourth st. S.							
Eighth av. S.	Fourth st.	Tenth st.	2,411.3						
Eighth av. S.	Third av. S. E.	Fifth av. S. E.	895.						
Ninth st. S. E.	Third av. S. E.	Across railroad	538.						
Ninth st. S. E.	Railroad	Eleventh av. S. E.	461.						
Como av. S. E.	Eleventh av.	Twenty-first av.				2,244.7			
Como av. S. E.	Eleventh av.	Prospect st.				2,781.1			
Cambridge st.	Oak st. S. E.	Taylor st.				978.8			
Division st.	Harrison st.	Pierce st.	745.						
Division st.	Taylor st.	Thirteenth av. S. E.				1,757.3			
Division st.	Pierce st.	Twelfth av. S. E.				156.9			
Sibley st. N. E.	Eleventh ave. S. E.	Eleventh st.	1,190.5						
Sibley st. N. E.	Eighth ave.	Thirteenth av.	796.3						
Sibley st. N. E.	Eleventh av.	Thirteenth av.							
Marshall st. N. E.	Thirteenth av.	Fifteenth av.	1,087.2						
Marshall st. N. E.	Fifteenth av.	Twenty-seventh av. N. E.	2,836.6						
Main st. N. E.	Central av.	Seventh av. N. E.	3,178.8						

Main st. N. E.	Seventh av.	Broadway.	1,574.8	820.					
Main st. N. E.	Broadway st.	Thirteenth av. N. E.		1,852.8					
Main st. N. E.	Thirteenth av. N. E.	Fourth av.		1,751.5					
Second st. N. E.	Fourth av.	Broadway.		2,815.					
Second st. N. E.	Central av.	Sixth av. N. E.			2,549.				
University av. N. E.	Six av. N. E.	Broadway.			1,730.5				
University av. N. E.	Central av.	Fourth st. N. E.	1,748.						
Fourth st. N. E.	Fourth av. N. E.	Sixth av. N. E.	838.2						
Fourth st. N. E.	Central av.	Broadway.	1,600.8						
Sixth st. N. E.	Central av.	Fourth av. N. E.	1,616.						
Fifth st. N. E.	Fourth av. N. E.	Broadway.		2,197.9					
Fifth st. N. E.	Fourth av. N. E.	Fifteenth av.	3,564.						
Adams st. N. E.	Fourth av.	Seventeenth av.	735.1						
Adams st. N. E.	Fifteenth av.	Fourth av.			170.7				
Madison st. N. E.	Third av.	Summer st.	1,327.1						
Madison st. N. E.	Summer	Broadway.	661.9						
Jefferson st. N. E.	Summer st.	Seventeenth av. N. E.		1,863.6					
Jefferson st. N. E.	Summer st.	Near 13th av. N. E.		1,105.5					
Monroe st. N. E.	Broadway.	Summer.	602.8						
Monroe st. N. E.	Broadway.	Eighteen & ½ av.		2,094.8					
Monroe st. N. E.	Third av.	Broadway.	1,731.						
Van Buren st. N. E.	Broadway.	Twelfth av.	379.						
Van Buren st. N. E.	Division st.	Broadway.							
Harrison st. N. E.	Present terminus.	Broadway.							
Harrison st. N. E.	18th & ½ av.	Twenty-fifth av.							
Harrison st. N. E.	Broadway.	18th & ½ av. N. E.							
Broadway st.	Main st. N. E.	Third st. N. E.		988.					
Broadway st.	Third st.	Adams st.		1,991.1					
Broadway st. N. E.	Adams st.	Jefferson st.		322.8					
Broadway st. N. E.	Monroe st.	Jefferson st.		654.					
Broadway st.	Monroe st.	Monroe st.		645.					
Broadway st.	Jackson st.	Van Buren st.	320.						
Broadway st.	Van Buren st.	Harrison st.		326.					
Branch at Atlantic									
Elevator			148.5						
Hydrant c'nect'ns.			13,919.						
Total.			314,911.1	192,413.8	16,786.3	115,108.	45,832.3	53,744.5	12,104.5

The following is the total number of feet of all kinds laid during the year 1889:

Six-inch pipe.....	14,738.7
Eight-inch pipe.....	6,111.1
Twelve-inch pipe.....	10,435.9
Sixteen-inch pipe.....	11,795.5
Twenty-four inch pipe.....	12,418.1

Total.....	55,554.3
Total number of miles laid during 1889.....	10 miles, 2,754 feet.
Total number of feet in city of all kinds.....	430,771 feet.
Total number of miles in city.....	142 miles, 1,011 feet.

Table No. 4.

Water Mains to be Laid in the Year 1890.

Extension No.	STREET OR AVENUE.	FROM—	TO—	Size in inches.	Approximate length, ft.
497	S. Aldrich av.....	W. Twenty-second st...	W. Twenty-seventh st	6	2,636
498	S. Aldrich av.....	W. Twenty-ninth st...	W. Thirty-first st....	6	1,201
499	N. Aldrich av.....	Sixteenth av. N.....	Twentieth av. N.....	6	1,436
500	Bloomington av.....	E. Lake st.....	E. Thirty-second st....	8	1,310
501	S. Colfax av.....	W. Lake st.....	W. Thirty-second st....	6	1,309
502	S. Colfax av.....	W. Twenty-seventh st.	W. Twents-eighth st...	6	607
503	Chicago av.....	E. Lake st.....	E. Thirty-fourth st....	8	2,513
559	Chicago av.....	E. Thirty-fourth st....	E. Thirty-eighth st....	12	2,676
504	Division st.....	Thirteenth av. S. E....	Fourteenth av. S. E....	12	330
505	N. Eleventh st.....	Chestnut av.....	Hennepin av.....	6	608
424	S. Eleventh st.....	First av. S.....	Third av. S.....	6	874
506	Eighth st. S. E....	Tenth av. S. E.....	Fourteenth av. S. E....	6	1,598
507	N. Eleventh st.....	Western av.....	Holden st.....	6	329
508	S. Eighth st.....	Twenty-fifth av. S....	Twenty-ninth av. S....	6	1,628
509	N. Emerson av.....	Twenty-fourth av. N...	Twenty-seventh av. N	6	1,494
510	First av. S.....	E. Thirty-third st....	E. Thirty-fourth st....	6	648
511	First av. S.....	S. Tenth st.....	S. Twelfth st.....	6	850
512	Fourth st. S. E....	Fifteenth av. S. E....	Sixteenth av. S. E....	6	410
513	Fifth av. S.....	E. Twenty-fourth st...	E. Twenty-seventh st.	6	2,016
514	Fillmore st.....	Broadway.....	Spring st.....	6	1,276
515	Fourth av. S.....	E. Thirty-first st....	E. Thirty-second st....	6	624
516	N. Fremont av.....	Twenty-seventh av. N...	Thirty second av. N....	6	1,930
517	S. Fremont av.....	W. Twenty-seventh st.	W. Twenty-eighth st....	6	614
518	Fifteenth av. S....	E. Twenty-fourth st....	E. Twenty-sixth st....	6	1,306
429	S. Fifth st.....	Third av. S.....	Sixth av. S.....	8	1,260
519	Fourteenth av. S....	E. Franklin av.....	E. Twenty-sixth st....	8	2,621
520	Fourteenth av. S. E.	Como av.....	Division st.....	12	1,322
521	Forty-first av. N...	Lyndale av.....	N. Second st.....	24	576
523	Fifteenth av. S. E....	Division st.....	Winter st.....	6	660
524	Garfield av.....	W. Twenty-fourth st...	W. Twenty-sixth st....	6	1,314
525	Groveland av.....	Clifton place.....	Hennepin av.....	6	408
526	E. Grant st.....	Nicollet av.....	First av. S.....	6	430
527	Grand av.....	W. Twenty-sixth st....	W. Twenty-seventh st.	6	640
528	Harriet av.....	W. Twenty-fourth st...	W. Twenty-fifth st....	6	694
529	S. Humboldt av.....	W. Thirty-third st....	W. Thirty-fourth st....	6	584
531	S. Irving av.....	W. Thirty-fourth st....	W. Thirty-fifth st....	6	629
532	N. James av.....	Fifth av. N.....	Sixth av. N.....	6	634
533	Jefferson st.....	Seventeenth av. N. E...	Eighteenth av. N. E...	8	530
443	N. Knox av.....	Present terminus.....	Plymouth av.....	6	374
534	Lindley av.....	W. Twenty-sixth st....	W. Twenty-eighth st....	6	1,254
447	E. Lake st.....	Third av. S.....	Chicago av.....	12	2,627
535	N. Lyndale av.....	Twenty-ninth av. N....	Thirty-second av. N....	16	1,421
536	N. Lyndale av.....	Thirty-second av. N....	Forty-first av. N.....	24	5,869
494	N. Morgan av.....	Tenth av. N.....	Twelfth av. N.....	6	627
453	Ninth av. S.....	E. Twenty-fifth st....	E. Twenty-sixth st....	6	643
537	W. Nineteenth st....	Ridgewood av.....	Lyndale av.....	6	1,970
538	Ninth av. S.....	E. Twenty-second st....	E. Twenty-fourth st....	6	687
539	Nicollet av.....	Thirty-second st....	Thirty-third st....	8	670
454	E. Nineteenth st....	Third av. S.....	Fifth av. S.....	24	994
540	Pleasant av.....	W. Franklin av.....	Ridgewood av.....	6	401
541	Polk st.....	Twenty-second av. N. E	Twenty-sixth av. N. E	6	1,821
541	N. Russell av.....	Sixth av. N.....	Tenth av. N.....	6	1,307
459	Riverside av.....	Cedar av.....	Twenty-first av. S....	16	1,439
543	Sixth av. N.....	James av.....	Russell av.....	6	2,785
544	Sixteenth av. S. E....	Talmadge av.....	Division st.....	6	655
545	Second av. S.....	E. Twenty-eighth st....	E. Lake st.....	6	1,328
488	S. Thirteenth st....	Harmon place.....	Vine place.....	6	814
546	Twenty-eighth av. N	Pacific st.....	N. Second st.....	6	794
547	E. Twenty-fifth st....	Park av.....	Portland av.....	6	661
548	Third st. S. E....	Oak st.....	Malcolm st.....	6	4,350
549	Twelfth av. S. E....	Como av.....	Division st.....	6	1,281
550	Tuttle st. S. E....	Talmadge av.....	Division st.....	6	655
493	Tenth av. N.....	Logan av.....	Morgan av.....	6	326
551	W. Thirty-fourth st.	Humboldt av.....	Irving av.....	6	329
552	W. Twenty-fourth st.	Garfield av.....	Lyndale av.....	6	328
553	Twenty-seventh av. N	Emerson av.....	Fremont av.....	6	337
554	Twenty-second av. N. E	Harrison st.....	Polk st.....	16	467
555	Thirteenth av. S. E....	Seventh st. S. E....	Eighth st. S. E....	6	380
556	Tenth av. S.....	E. Twenty-fourth st....	E. Twenty-fifth st....	6	610
558	W. Thirty-third st....	Hennepin av.....	Humboldt av.....	12	657
560	Tenth av. S.....	E. Twenty-second st....	E. Twenty-fourth st....	6	713
561	Tenth av. S.....	E. Thirty-eighth st....	E. Thirty-ninth st....	6	633
562	E. Thirty-eighth st....	Chicago av.....	Tenth av. S.....	16	714
475	Washington st.....	Fifth st N. E.....	Seventeenth av. N. E..	12	3,828

Table No. 5.

WEST SIDE.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrant	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
N Aldrich av..	Western av...			1 N						
	3d av N.....	1 SW								
	4th av N.....	1 SW								
	5th av N.....	1 SW								
	6th av N.....	1 SW		1 N						
	½ wy. to 8 av N	1								
	Hawthorn av..			1 N						
	Linden av.....	1 SW								
S Aldrich av..	W 27th st.....			1 S						
	W 28th st.....	1 NW								
At'tic ele'tor.	Nr. 36-in. pipe			1 N						
	41 ft. S of 36-in pipe.....	1								
	103 ft. S of 36-in pipe.....	1								
Blaisdell av..	W Fra'klin av			1 S						
	W 22d st.....	1 NW								
	W 24th st.....	1 NW		1 S						
	W 25th st.....	1 NW								
	W 26th st.....	1 SW								
	Half way.....	1								
	W 27th st.....			1 N						
	W Lake st.....				1 S					
	W 31st st.....	1 NW								
	W 32d st.....	1 NW			1 S					
	W 33d st.....	1 NW								
Bloom'ton av.	E Franklin av				1 S					
	E 21st st.....	1 NW								
	E 22d st.....	1 NW								
	E 23d st.....	1 NW								
	E 24th st.....	1 NW			1 S					
	Half way.....	1								
	E 25th st.....	1 NW								
	Half way.....	1								
	E 26th st.....	1 NW								
	Half way.....	1								
	E 27th st.....	1 NW			2 N & S					
	Half way.....	1								
	E 28th st.....	1 NW								
	E 29th st.....	1 NW								
	E Lake st.....	1 NW			1 N					
Bovey sawmil	Near 39th av N	2								
N Bryant av.	Western av...			1 N						
	3d av N.....	1 SW								
	4th av N.....	1 SW								
	5th av N.....	1 SW								
	6th av N.....	1 SW								
	8th av N.....	1 SW		2 N & S						
	11th av N.....	1 SW		1 S						
	12th av N.....	1 SW								
	Plymouth av..	1 SW								
	14th av N.....	1 SW		2 N & S						
	15th av N.....	1 SW								
	16th av N.....	1 SW								
	17th av N.....	1 SW		1 N						
	18th av N.....	1 SW								
	20th av N.....	1 SW		1 S						
Cedar av.....	Bluff st.....	1 SW								
	S 2d st.....	1 SE								
	S Wash. av...			*2 S						
	S 3d st.....	1 NW								
	S 4th st.....	1 SW		1 S						
	S 6th st.....	1 SW			2 N & S					
	S 7th st.....	1 SW								
	Minnehaha av	1 SW			2 N & S					
	S 9th st.....	1 SW								
	E Franklin av			2 N & S						
	E 2d st ½ way	1								
	E 22d st.....	1 NW								
	Half way.....	1								
	E 24th st.....	1 NW			1 S					
	Half way.....	1								

*Is between the two Washington avenue pipes.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
Cedar av	E 25th st.	1 NW								
	Half way	1								
	E 26th st.	1 NW			1 S					
	Half way	1			1 S					
	E 27th st.	1 NW								
	Half way	1								
	E 28th st.	1 NW			1 N					
	E 29th st.	1 NW								
	Half way	1								
	E Lake st.	1 NW								
	E 31st st.	1 NW			1 S					
	E 32d st.	1 NW								
	E 33d st.	1 NW								
	E 34th st.	1 NW			1 N					
Chestnut av.	N 11th st.	1 SW		1 N						
	N 12th st.	1 SW								
Chicago av...	Half way	1								
	N 15th st.	1 SE		1 E						
	S 10th st.	1 SW			1 S					
	E 15th st.	1 NW								
	E 16th st.	1 NW								
	E 17th st.	1 NW			1 N					
	E 18th st.	1 NW								
	E 19th st.	1 NW								
	E Franklin av	1 NW			2 N & S					
	E 21st st.	1 NW								
	E 22d st.	1 NW								
	E 23d st.	1 NW								
	E 24th st.	1 NW								
	Half way	1								
	E 25th st.	1 NW			2 N & S					
	Half way	1								
	E 26th st.	1 NW								
	Half way	1								
	E 27th st.	1 NW			2 N & S					
	Half way	1								
Clifton av....	E 28th st.	1 NW								
	Half way	1								
	E Lake st.	1 NW			1 N					
	Vine place.			1 W						
	Sixth way.									
	Third way.									
	Half way.			1						
	½ way.									
Clinton av....	5-6 way.			1						
	Clifton place.									
	E Grant st.	1 SW			1 S					
	E 14th st.	1 NW								
	E 15th st.	1 NW								
	E 16th st.	1 NW								
	E 17th st.	1 NW								
	E 18th st.	1 NW			1 N					
	E 19th st.	1 NW								
	E Franklin av	1 NW			2 N & S					
	Half way.	1								
	E 22nd st.	1 NW								
	Half way.	1								
	E 24th st.				1 N					
	E 25th st.			1 S						
	Half way.	1								
	E 26th st.	1 NW								
	Half way.	1								
S Colfax av...	E 27th st.	1 NW		2 N & S						
	E 28th st.	1 NW								
	E 32nd st.	1 NW								
	W 24th st.	1 SW								
	W 25th st.	1 NW		1 N						
	W 26th st.	1 NW								
S Colfax av...	W 27th st.	1 NW		1 N						
N Dupont av.	6th av N.				1 N					
	11th av N.				1 N					
	Half way.	1								
	12th av N.	1 SW								
	Plymouth av.	1 SW								

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
N Dupont av.	14th av N.	1 SW			2 N & S					
	15th av N.	1 SW								
	16th av N.	1 SW			2 N & S					
	17th av N.	1 SW								
	18th av N.	1 SW								
	Half way	1								
	20th av N.				2 N & S					
	21st av N.	1 SW								
	22d av N.	1 SW								
	23d av N.	1 SW			1 N					
	24th av N.	1 SW								
	25th av N.	1 SW								
	26th av N.	1 SW			1 S					
S Dupont av.	W 26th st.	1 SW								
	W 27th st.				2 N & S					
	W 28th st.	1 NW								
	W 29th st.	1 SW			2 N & S					
	W Lake st.				2 N & S					
	Half way	1								
	W 31st st.	1 NW								
	Half way	1								
	W 32d st.	1 NW			1 S					
	½ way W 33d.	1								
N Eighth st.	Hennepin av.				1 N					
S Eighth st.	Hennepin av.				1 S					
	Mary place.	1 SW								
	Nicollet av.	1 SE			1 N					
	1st av. S.	1 NE								
	2d av. S.	1 NE			1 N					
	3d av. S.	1 SE								
	4th av. S.	1 SE								
	5th av. S.				1 N		1 S			
	6th av. S.	1 SE								
	7th av. S.	1 SE					1 N			
	8th av. S.	1 SE					1 S			
	9th av. S.	1 SE								
	10th av. S.	1 SE								
	11th av. S.						2 N & S			
	12th av. S.	1*								
	13th av. S.	1 NW					1 S			
	14th av. S.	1 NE								
	15th av. S.	1 NE								
	16th av. S.	1 NE					2 N & S			
	17th av. S.	1 SE								
	Cedar av.	1 NE								
	21st av. S.	1 SE								
	22d av. S.				1 W					
Eighth av. N.	N 5th st.				1 W					
	Hoag av.	1 SE								
	Bradford av.	1 SE								
	Oak Lake av.	1 SE			1 E					
	½ way to Lyn.	1								
8th av N.	Lyndale av.				1 E					
	Girard av.				2 E & W					
	Humboldt av.	1 NE								
	Irving av.	1 NE								
	Elwood av.	1 NE			1 W		1 E			
8th av S.	Logan av.	1 NE			1 E					
	Wash. av.				1 W					
	S 3d st.	1 NW								
	S 4th st.	1 NW			2 E & W					
	S 5th st.	1 NW								
	S 6th st.				2 E & W					
	S 7th st.	1 NW								
	S 8th st.	1 NW								
	S 9th st.	1 NW								
	S 10th st.				1 E					
8th av N.	N 1st st.	1 NW								
	N 2d st.				1 E					
18th av S.	E Franklin av.				1 S					
	Half way.	1								
	E 22d st.	1 NW								
	Half way.	1								
	E 24th st.	1 NW			1 N					

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
N 11th st....	1st av N.....	1 SE		1 N						
	Western av....			1 S						
S 11th st.....	Hennepin av....			1 S						
	Harmon place	1 NW		1 N						
	Mary plac.....	1 SE								
	Nicollet av....	1 SE	2 N & S							
	1st av S.....	1 NE								
S. 11th st.....	3d av. S.....	1 SE								
	4th av. S.....	1 SE								
	5th av. S.....				1 N					
11th av. N.....	N. 5th st.....			1 W						
	N. 6th st.....	1 NE								
	Lyndale av....	1 NE	2 E & W							
	Aldrich av....	1 NE								
	Bryant av.....	1 NE		1 E						
	Dupont av.....	1 NE								
	Emerson av....	1 NE		1 E						
	Fremont av....	1 NE								
11th av. S.....	S. 2d st.....						1 W			
	Wash. av.....						2 E & W			
	S. 3d st.....	1 NE								
	Flush									
	S. 4th st.....	1 NW								
	S. 5th st.....	1 NW								
	Flush						1 W			
	S. 6th st.....	1 NW								
	Flush									
	S. 7th st.....	1 NW								
	S. 8th st.....	1 NE								
	Flush						1 E			
	E. 14th st.....	1 SW								
	S. 9th st.....	1 SW								
	E. 17th st.....	1 NW								
	E. 18th st.....	1 NW								
	E. 19th st.....	1 NW								
	E. Franklin av	1 NW					2 N & S			
	E. 21st st.....	1 NW								
	E. 22d st.....	1 NW								
	E. 23d st.....	1 NW								
	E. 24th st.....	1 NW					1 N			
Elwood av....	6th av N.....	1 NW		1 N						
	Irving av.....	1 SE								
N Em'rsen av.	6th av N.....			1 N						
	Half way.....	1								
	8th av N.....	1 SW		2 N & S						
	Half way.....	1								
	11th av N.....	1 SW		1 N						
	Half way.....	1								
	12th av N.....	1 SW								
	Plymouth av..	1 SW		2 N & S						
	14th av N.....	1 SW								
	15th av N.....	1 SW								
	16th av N.....			1 S						
	½ way from 18th to 20th									
	av N.....	1								
	20th av N.....	1 SW		1 S						
	21st av N.....	1 SW		2 N & S						
	22d av N.....	1 SW								
	23d av N.....	1 SW								
	24th av N.....	1 SW								
Erie av.....	Lyndale av....	1 NE		1 E						
15th av N.....	N 1st st.....	1 NW								
	N 2d st.....			2 E & W						
	W'shing't'n av	1 NE								
	N 3d st.....	1 NE								
15th av S.....	W'shing't'n av			1 W						
	S 3rd st.....	1 NE								
	S 4th st.....	1 NW								
	S 5th st.....	1 NW		1 E						
	S 6th st.....	1 NW			2 E & W					
	S 7th st.....	1 NW								
	S 8th st.....	1 NW			1 W					
	S 9th st.....	1 NW								
	S 10th st.....	1 NW			1 E					
	E 18th st.....	1 SW								

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
15th av. S.....	E 19th st.....	1 NW (waters)								
	E Franklin av	1 NW			1 N					
E 15th st.....	3d av. S.....	1 SE		1 E						
	Clinton av.....	1 SE								
	4th av. S.....	1 SE								
	5th av. S.....			1 W						
	Portland av.....	1 SE		1 E						
	Half way.....	1								
	Park av.....			1 W						
W. 15th st.....	Nicollet av.....	1 SW		1 W						
	Vine place.....	1 SE								
	Spruce place.....	1 SE								
N. 5th st.....	1st av. N.....	1 NW (flush)		1 N						
	2d av. N.....	1 SE		2 N & S						
	3d av. N.....	1 SE								
	4th av. N.....	1 NW		1 N						
	5th av. N.....	1 SE								
	6th av. N.....			1 S						
	7th av. N.....	1 SE								
	8th av. N.....	1 SE		1 N						
	9th av. N.....	1 SE								
	10th av. N.....	1 SE								
	11 av. N eastwd	1 SE								
	11 av. N. N.....	1 NE								
S 5th st.....	Hennepin.....			1 S						
	Half way.....	1								
	Nicollet av.....	1 SE		1 N	1 S					
	1st av S.....	1 NE			1 N					
	2d av S.....	1 NE								
	6th av S.....	1 SE		1 S						
	7th av S.....	1 SE								
	8th av S.....	1 SE								
	9th av S.....	1 SE								
	10th av S.....	1 SE								
	11th av S.....	1 NE		1 N			1 S			
	12th av S.....	1 NE								
	Flush.....									
	13th av S.....	1 SE					1 S			
	14th av S.....	1 SE								
	15th av S.....	1 SE					1 N			
	16th av S.....	1 SE								
	Cedar av.....	1 NE					1 W			
	19th av S.....	1 NE								
	20th av S.....	1 NE								
	21st av S.....	1 NE								
	22d av S.....	1 NE								
5th av S.....	S 2d st.....	1 SE								
	Wash. av.....	1 NW						1 E		
		1 SW								
	S 3d st.....	1 NE								
		1 SW								
	S 4th st.....	1 SW							1 W	
	S 5th st.....	1 SW								
	S 6th st.....	1 SW								
	S 7th st.....	1 SW								
	S 8th st.....	1 SW							2 E & W	
	S. 9th st.....	1 SE								
	S. 10th st.....	1 NW								
	S. 11th st.....	1 NW								
	E. Grant st.....	1 SW							2 N & S	
	E. 14th st.....	1 NW								
	E. 15th st.....	1 NW								
	E. 16th st.....	1 NW								
	E. 17th st.....	1 NW							1 S	
	E. 18th st.....	1 NW								
	E. 19th st.....	1 SW					1 S			
	E. Franklin av	1 NW			*1					
	Half way.....	1								
	E. 22d st.....	1 NW								
	Half way.....	1								
	E. 24th st.....						1 N			
N. 1st st.....	Hennepin av	1 Lowry		2 N & S						
	1st av. N.....	1 NW								

*On connection.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
N. 1st st.....	2d av. N.....	1 NW								
	3d av. N.....	1 SW		1 S						
	4th av. N.....	1 NE								
	5th av. N.....	1 SE								
	6th av. N.....	1 SE								
	7th av. N.....	1 SE		1 N						
	N. Bass't's c'k	1								
	8th av. N.....	1 SE		1 N						
	9th av. N.....	1 SE								
	10th av. N.....	1 SE		1 S						
S. 1st st.....	Hennepin av.							1 S		
	Nicollet av.....	1 SW								
		1 SE								
S First st.....	1st av S.....	1 NE								
		1 SW								
	2d av S.....	1 NE		*1 N						
	3d av S.....	1 NE								
	4th av S.....	1 SW						1		
	5th av S.....	1 NW								
	S of pump ho.	16 W								
First av N....	River st.....	1 NW								
	N 1st st.....		1 E							
	W's'ng't'n av.			1 W						
	N 3rd st.....	1 NW		#1 E						
	N 4th st.....	#1 NW								
		Flush		1 E						
	N 5th st.....	1 NW		1 W						
	N 6th st.....	1 NW								
	N 7th st.....	1 NE								
	N 8th st.....	1 NW		1 E						
	N 9th st.....	1 NW								
	N 11th st.....	Lowry	2 E & W							
	N 12th st.....	1 NW		1 W						
	N 13th st.....	1 NE								
	N 15th st.....	1 NE								
First av S....	½ way from 2d st to Wash- ington av.....		\$1							
	W's'ng't'n av.			2 E & W						
	S 3d st.....	1 SE		2 E & W						
	S 4th st.....	1 SW								
	S 5th st.....	1 SW								
	S 6th st.....	1 SW			2 E & W					
	S 7th st.....	1 SE		1 E						
	S 8th st.....	1 SW								
	S 9th st.....	1 SW								
	S 10th st.....			1 E						
	S 12th st.....				1 E				1 W	
	S 13th st.....	1 SE								
	E Grant st.....	1 SE								
	E 14th st.....	1 NW		1 S					1 N	
	E 22d st.....	1 SW								
	Half way.....	1								
	E 24th st.....	1 SW		1 N						
	Half way.....	1								
	E 25th st.....			2 N & S						
	Half way.....	1								
	E 26th st.....	1 NW								
	Half way.....	1								
	E 27th st.....			2 N & S						
	Half way.....	1								
	E 28th st.....	1 NW								
	E 29th st.....	1 SW		2 N & S						
	E Lake st.....			2 N & S						
	E 31st st.....	1 NW								
	E 32d st.....	1 NW								
	E 33d st.....	1 NW		1 N						
14th av. S.....	S 1st st.....	1 SW								
	S 2d st.....	1 SE								
	Wash. av.....	1 SE		1 E						
	S 8th st.....	1 SW		1 W						
	S 9th st.....	1 SW		1 W						
	angle.....	1								
	E 18th st.....	1 NE								

* North of west pipe. † With six spouts from 6-inch pipe leading from pump house.
 ‡ 6-inch connection. § 4-inch bend. ¶ North and south of tracks.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
14th av. S....	E 19th st.....	1 NE								
	E Franklin av	1 NE		1 N						
	E 26th st.....				1 S					
	E 27th st.....	1 NE								
	E 28th st.....	1 NE			1 N					
	E 29th st.....	1 NE								
	E Lake st.....	1 NE			1 N					
E. 14th st...	1st av. S.....	1 SE		1 W					1 E	
	Stevens av.....	1 SE								
	2d av. S.....	1 SE								
	3d av. S.....	1 SE		1 E					1 W	
	Portland av..	1 SE		1 E						
	Park av.....	1 SW								
	South 10th st.	1 SW								
	Chicago av.....	1 NE								
	9th av. S.....	1 NW								
	10th av. S.....	1 NW								
	11th av. S.....	1 NW								
	Willow st.....	1 NE								
	Hennepin av.			1 N						
	1st av. N.....	1 SW		1 N						
	2d av. N.....	1 SW		2 N & S						
	3d av. N.....	1 SW		1 S						
	6th av. N.....	1 NW								
W. 14th st.... N. 4th st.....	7th av. N (eastward).....			1 N						
	7th av. N (westward).....	1 SW								
	Half way.....	1		*1						
	8th av. N.....	1 SW		1						
	9th av. N.....	1 SW		1 N						
	10th av. N.....	1 SW								
	11th av. N.....	1 SW								
	12th av. N.....	1 SW								
	Plymouth av.	1 NE								
	14th av. N.....	1 SW		2 N & S						
	15th av. N.....	1 NE		1						
	16th av. N.....	1 SE								
	17th av. N.....	1 SW								
	18th av. N.....	1 SW								
	Half way.....	1								
	20th av. N.....			1 N						
				1 S						
S. Fourth st..	21st av. N.....	1 SW								
	Hennepin av.	1 SW			1 S					
	Nicollet av.....	1 SW			1 S					
	1st av. S.....	1 NW								
	2d av. S.....	1 NW		1 S						
	3d av. S.....	1 NE								
	4th av. S.....	1 NE		1 S						
	5th av. S.....	1 NE		2 N & S						
	6th av. S.....	1 SW		1 N			1 S			
	7th av. S.....	1 SW								
	8th av. S.....	1 SW					1 S			
	9th av. S.....	1 SW								
	10th av. S.....	1 SW								
	11th av. S.....	1 SW					1 N	1 S		
	12th av. S.....	1 SW								
	13th av. S.....	1 SW								
	14th av. S.....	1 NW						1 S		
	15th av. S.....	1 SW								
	16th av. S.....	1 SW								
	Cedar av.....	1 SE								
S 4th st.....	Cedar av.....	1 SW		1						
	19th av S.....	1 SE								
	20th av S.....	1 SE								
	21st av S.....	1 SE								
Fourth av N..	22d av S.....	1 SW		1 W	1 E					
	N 1st st.....									
Fourth av S..	Alley.....	1 NW								
	East of tracks	2								
	Wash. av.....	1 NW		1 W						
	S 3d st.....			2 E & W						
	S 4th st.....	1 NW								

*Waste gate into creek

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No and lo- cation of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
Fourth av S.	S 5th st.....	1 NW								
	S 6th st.....	1 NW		2 E & W						
	S 7th st.....	1 NW								
	S 8th st.....	1 NW		1 W						
	S 9th st.....	1 NW								
	S 10th st.....			2 E & W						
	S 11th st.....	1 NE								
	E Grant st.....	1 NW								
	E 14th st.....	1 NW								
	E 15th st.....	1 NW								
	E 16th st.....	1 NW		1 N						
	E 17th st.....	1 SW								
	E 18th st.....	1 NW		1 S						
	E 19th st.....	1 NW								
	E Franklin av	1 NW		2 N & S						
	E 22d st.....	1 NW								
	E 24th st.....	1 NW		2 N & S						
	Half way.....	1								
	E 25th st.....			2 N & S						
	E 26th st.....	1 NW								
	E 32d st.....	1 SW								
	E 33d st.....	1 NW		1 N						
	N 14th st.....	Hennepin av.		1 N						
	E Fr'nklin av.	Nicollet av.....	1 SE		1 E					
	1st av S.....	1 SE								
N 14th st.....	Stevens av.....	Waters								
	2d av S.....	1 SE								
	3d av S.....	1 SE								
	3d av S.....	1 SE		*2 E & W	2 E & W					
	Clinton av.....	1 SE								
	4th av S.....	1 SE								
	5th av S.....	1 SE								
	Portland av.....	1 SE		1 E	1 W					
	Portland pl.....	1 SE								
	Park av.....	1 SE								
	Park pl.....	1 SE								
	Chicago av.....	1 SE								
	9th av S.....	1 SE			1 W					
	10th av S.....	1 SE								
	11th av S.....	1 SE								
	12th av S.....	1 SE								
	13th av S.....	1 SE								
	14th av South (southward.)	1 SW			1 W					
	15th av S.....	1 SE								
	Bl'm'ngt'n av	1 SE								
	16th av South (southward.)	1 SE								
	17th av S.....	1 SE								
	18th av S.....	1 SE								
	Cedar av.....	1 SW			1 W					
	19th av S.....	1 SE			1 E					
	Min'haha av.....			1 E	1 W					
	20th av S.....	1 SE								
	21st av S.....	1 SE								
	22d av S.....	1 SE								
	23d av S.....	1 SE								
	24th av S.....	1 SE								
E. Fr'nklin av	Half way.....			1						
	25th av S.....	1 NW								
	Nicollet av.....						1 W			
	Blaisdell av.....	1 SE								
	Lindley av.....	1 SE								
	Pleasant av.....	1 SE					1 E			
	Grand av.....	1 SE								
	Harriet av.....	1 SE								
	Garfield av.....	1 SE								
	Lyndale av.....	1 SE					1 E			
W. Fr'klin av.	6th av. N.....			1 N						
	Half way.....	1								
	8th av. N.....	1 SW		2 N & S						
	Half way.....	1								
	11th av. N.....	1 SW								
N. Fremont av	6th av. N.....			1 N						
	Half way.....	1								
	8th av. N.....	1 SW		2 N & S						
	Half way.....	1								
	11th av. N.....	1 SW								

*Waste gate.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
40th av. N....	N 2d st.....	1 SW						1 W		
41st av. N.....	N 2d st.....							*1		1
Garfield av....	W 26th st....	1 SW								
	Half way.....	1								
	W 27th st....			1 N						
N. Girard av....	5th av. N....	1 NW								
N Girard av....	6th av N.....	1 SW		2 N & S						
	Half way.....	1		1						
	8th av N.....	1 SW			1 S					
Grand av.....	w Franklin av			1 S						
	W 22d st....	1 NW								
	W 24th st....	1 NW		1 N						
	W Lake st....	1 SW		1 S						
	Half way.....	1								
	W 31st st....	1 NW								
E Grant st....	1st av S.....			1 W						
	3d av S.....						2 E & W			
Groveland av.	Clifton place.	1 SE								
	Hennepin av.	1 SW				1 W	*1			
	½ way.....	1								
	¾ way Hillside	1								
Harmon place	S 12th st....	1 NE		2 E & W						
	S 13th st....	1 NE								
	Spruce place.	1 NE								
	Willow st....	1 NE								
	Maple st....	1 NE								
Harriet av....	Hennepin av.	1 NE		1 E						
	w Franklin av			1 S						
	W 22d st....	1 NW								
	W 24th st....	1 NW								
	W 25th st....	1 SW			1 S					
	W 26th st....	1 NW								
	W 27th st....			2 N & S						
	W 28th st....	1 NW								
	W 29th st....	1 NW								
	W Lake st....			2 N & S						
	W 31st st....	1 NW								
	W 32d st....	1 NW		1 S						
	W 33d st....	1 NW								
Hawthorn av.	N 10th st....	1 NE						1 E		
	N 11th st....	1 NW								
	N 12th st....							1 E	1 W	
	N 13th st....	1 SE								
	N 15th st....	1 NE							1 E	
	N 16th st....	1 NE								
	N 17th st....	1 NE								
	Lyndale av..	1 SW		1 W					1 E	
	Aldrich av..	1 SW								
	Bryant av....	1 SE								
Hennepin av.	N 1st st....				2 E					
					1 W		1 E			
	N 2d st....	1 Lowry								
	Wash. av....			2 E & W						
	N 3d st....	1 NW		*1 W						
	N 4th st....	1 NW								
	N 5th st....	1 NE			1 E					
	N 6th st....	1 NE								
	N 7th st....	1 NW			1 E					
	N 8th st....	1 NW								
	N 9th st....	1 NE								
	N 10th st....	1 NW			1 W					
	N 11th st....	1 NW								
	N 12th st....	1 NW			2 E & W					
	N 13th st....	1 NW								
	N 14th st....	1 NE								
	N 15th st....	1 NE								
	N 16th st....	1 NE			1 E					
	Erie av....	1 SW								
	Harmon place	1 NW								
	Huron av....									
	Superior av..	1 NW								
	Oak Grove st.	1 NW			1 S					
	Lyndale av..	*1 E								

*On side of large pipe 36 inches. †Between Hennepin and Lyndale pipes. ‡On 8-in. connection.

§Side of Hennepin.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
Hennepin av.	Groveland av (Between)...						1			
	Summit av...	1 NW								
	Lincoln av...	1 NW								
	Half way...	1								
	w Franklin av	1 NW					1 S			
	Half way...	1								
	W 22d st...	1 NW								
	Half way...	1								
	W 24th st...	1 NW					2 N & S			
	Half way...	1								
	W 25th st...	1 NW								
	Half way...	1								
	W 26th st...	1 NW					1 S			
	Half way...	1								
	W 27th st...	1 NW								
	Half way...	1								
	W 28th st...	1 NW								
	Half way...	1								
	N of R R...						1 N			
	S of R R...									
	(At 29th st)...	1 NW					1 S			
	Half way...	1								
	W Lake st...	1 SW					2 N & S			
	½ way Lake to 31st st...	1								
	W 31st st...	1 NW								
	Half way...	1								
	W 32d st...	1 NW					1 N			
	Half way...	1								
	W 33d st...	1 NW								
Hiawatha av.	E 24th st...	1 SW			1 S					
	E 25th st...	1 SW								
	E 25½ st...	1 SW								
	E 26th st...	1 SW			2 N & S					
	E 27th st...	1 SW								
	E 28th st...	1 NW								
	E 29th st...	1 NW								
	E Lake st...				1 N					
Highland av.	near lot 6, b 4...	1								
	Royalston av...	1		1 W						
	near lot 16, b 4...	1								
	near lot 15, b 2...	1								
Hillside place	Lyndale av...	1 NE		1 E						
	Groveland av	1 SW				1 S				
N Humb'd tav	Mt. Curve av...	1 NW								
	5th av N...	1 NW								
N Irving av..	6th av N...	1 SW								
	Western av...			1 N						
	4th av N...	1 SW								
	5th av N...	1 SW								
	6th av N...	1 SW		1 S						
	8th av N...			1 N						
	Oak Park plac	1 SW								
	20th av. N...			1 N						
N. Irving av..	21st av. N...	1 SW								
N. James av..	Western av...			1 N						
	4th av. N...	1 SW								
	5th av. N...	1 SW								
	6th av. N...			1 N						
	Half way...	1								
	Thomas place	1 NW								
	8th av. N...	1 SW		1 S						
	Douglass av...	2 W. side				1 S				
Kenwood B...	Penn av...	1 NE								
	Sheridan av...	1 NW				1 S				
	Queen av...	1 NW								
	Al'y in line of									
	W Fr'klin av...	1 NW								
	W 21st St...	1 NW				1 N				
	W 22d st...	1 NW								
	Lake of the Isles boulev	1 NW								
N. Knox av..	10th av. N...	1 SW		1 N						
	Alley...	1 NW								
	12th av. N...	1 SW								

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
N. Knox av...	Half way to Plymouth...	1								
E. Lake st...	Nicollet av...	1 NE					1 E			
	1st av. S...	1 NE								
	Stevens av...	1 NE								
	2d av. S...	1 NE								
	3d av. S...						1 W			
	9th av. S...	1 NW								
	Hiawatha av...	1 NE								
	C.M.&St.P.Ry	1 E								
	Snell av...	1 NE					1 W			
E Lake st....	Minneh'ha av	1 NW								
	27th av S...	1 NW								
W Lake st...	Blaisdell av...	1 NE								
	Lindley av...	1 NE								
	Pleasant av...	1 NE					1 E			
	Grand av...	1 NE								
	Harriet av...	1 NE								
	Garfield av...	1 NE								
	Lyndale av...	1 NE					2 E & W			
	Aldrich av...	1 NE								
	Bryant av...	1 NE								
	Colfax av...	1 NE								
	Dupont av...	1 NE					1 E			
	Emerson av...	1 NE								
	Fremont av...	1 NE								
	Glrad av...	1 NE								
	Hennepin av...	1 NE					1 E			
Laurel av ...	N 15th st...	1 NE								
	N 16th st...	1 NE		1 W						
	N 17th st...	1 NE								
	Lyndale av...	1 NE	2 E & W							
	Aldrich av...	1 NE								
	Bryant av...	1 NE								
	Colfax av...	1 NE		1 E						
Linden av ...	N 12th st...			1 W						
	N 13th st...	1 NE								
	N 15th st...	1 NE								
	N 16th st...	1 NE								
	N 17th st...	1 NE								
Linden av...	Lyndale av...	1 NE	2 E & W							
	Aldrich av...	1 NE								
Lindley av...	W Lake st...	1 SW		1 S						
	Half way...									
	W 31st st...	1 NW								
	Half way...									
	W 32d st...	1 NW		1 N						
N Logan av...	8th av N...			1 N						
	Half way...									
	10th av N...	1 SW								
	Half way...									
	12th av N...	1 SW		1 S						
	Half way...									
	Plymouth av...	1 SW								
N Lyndale av	Superior av...	1 NW							1 N	
	Huron av...	1 NW								
	Erle av...	1 SW								
	Ontario av...	1 SW								
	Laurel av...								1 N	
	Hawthorn av							1 S		
	Chestnut av...	1 SW						1 N		
	1st av N...	1 SW						1 S		
	Western av...	1 SW						1 N		
	3d av N...	1 SW								
	4th av N...	1 SW								
	5th av N...	1 SW						1 S		
	7th av N...	1 SW								
	8th av N...	1 SW								
	11th av N...							1 S		
	½ w'y 11 av. N to 12th av. N	1								
	12th av. N...	1 SW								
	Plymouth av...	1 SW								
	14th av. N...	1 SW						2 N & S		
	15th av. N...	1 SW								
	16th av. N...	1 SW								

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
N Lyndale av	17th av. N....	1 SW						1 S		
	18th av. N....	1 SW								
	Half way....	1								
	20th av. N....	1 SW						1 N		
	21st av. N....	1 SW								
	22d av. N....	1 SW								
	23d av. N....	1 SW						1 N		
	24th av. N....	1 SW								
	25th av. N....	1 SW								
	26th av. N....	1 SW							2 N & S	
	27th av. N....	1 SW								
	29th av. N....	1 SW						1 S		
S Lyndale av.	Superior av....								1 S	
	Vineland av....	1 NW								
	Groveland av....	1 SW							1 S	
	Summit av....	1 NW								
	Lincoln av....	1 NW								
	W Franklin av....	1 NW							2 N & S	
	W 22d st....			*1						
	W 24th st....	1 SW							1 N	
	Half way....	1								
	W 25th st....	1 NW							2 N & S	
	W 26th st....	1 NW								
	W 27th st....				1 S				1 N	
	W 28th st....	1 NW								
	Half way....	1								
	R R tracks....				1 N					
	W 29th st....	1 NW								
	Half way....	1								
	W Lake st....				2 N & S					
	Half way....	1								
	W 31st st....	1 NW								
	Half way....	1								
Minnehaha av	W 32d st....	1 NW			1 N					
	Cedar av....	1 NE								
	E Franklin av....	1 NE								
	20th av S....						1 S			
	22d av S....	1 SE								
	23d av S....	1 SE								
	24th av S....	1 SE								
	25th av S....	1 SE								
	E 26th st....	1 NE					1 N			
N Morgan av.	Western av....			1 N						
	4th av N....	1 SW								
Mt. Curve av.	Emerson av....	1 SE								
	Fremont av....	1 SW					1 W			
	Girard av....	1 SE								
	Humboldt av....	1 SE								
	Irving av....	1 SE				1 E				
	James av....	1 SE								
	Knov av....	1 SE								
	Logan av....	1 SE								
	Newton av....	1 SE				1 E				
Nicollet av...	S 1st st....			1 W						
	S 2d st....	1 SW								
	Wash. av....	1 SE		2 E & W						
	S 3d st....	1 Lowry								
	4in pipe									
	S 4th st....	1 NE		1 E						
	S 5th st....	1 NE		1 W						
	S 6th st....	1 NW		2 E & W						
	S 7th st....	1 NW		1 W						
	S 8th st....	1 NE		1 W						
	S 9th st....	1 NW								
	S 10th st....			2 E & W						
	S 11th st....	1 NW								
	S 12th st....	1 NW		2 E & W						
	S 13th st....	1 NW								
	W Grant st....	1 SW								
	W 14th st....	1 NW								
	W 15th st....	1 opp NE								
	Oak Grove st....	1 NW								
	W 18th st....	1 NW								
	W 19th st....	1 NW		1 N						
	w Franklin av....	1 NW		2 N & S						

* On hydrant branch for waste gate.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
Nicollet av....	Half way.....	1								
	W 22d st.....	1 NW								
	Half way.....	1								
	W 24th st.....	1 SW		1 N						
	W 25th st.....	1 NW								
	W 26th st.....	1 NW								
	W 27th st.....	1 NW		2 N & S						
	W 28th st.....	1 NW								
	W 29th st.....	1 NW								
	W Lake st.....	1 NW		1 N	1 S					
	Half way.....	1								
	W 31st st.....	1 NW								
	Half way.....	1								
	W 32d st.....	1 NW			1 N					
	15th av S.....	1 SE		1 E						
E 19th st.....	16th av S.....	1 SW								
W 19th st.....	Lindley av.....	1 SE								
	S 5th st.....	1 SW		1 S						
	S 6th st.....	1 NW								
	S 7th st.....	1 NW								
19th av S.....	S 8th st.....	1 NW								
	Hawthorn av.....	1 NW								
	1st av N.....							1 S		
S 9th st.....	Western av.....	1 SW								
	Hennepin av.....			1 S						
	Mary place.....	1 SW								
	Nicollet av.....			1 S						
9th av S.....	1st av S.....	1 NE								
	2d av S.....	1 SE		1 N						
	3d av S.....	1 SE								
	4th av S.....	1 SE								
	5th av S.....	1 NE		2 N & S						
	6th av S.....	1 SE								
	11th av S.....			1 S						3
	12th av S.....	1 SE								
	E 14th st.....				1 S					
	E 15th st.....	1 NW								
	E 16th st.....	1 NW								
	E 17th st.....	1 NW			1 S					
Oak Grove st.	E 18th st.....	1 NW								
	E 19th st.....	1 NW								
	E Franklin av.....			1 S	1 N					
	E 21st st.....	1 NW								
	E 22d st.....	1 NW								
	E 24th st.....			1 S						
	E 25th st.....	1 NW								
	E 28th st.....			1 S						
	E 29th st.....	1 SW								
	E Lake st.....			1 N						
	Nicollet av.....			1 W						
	Vine place.....	1 SW								
	Spruce place.....	1 SW								
	Near lot C.....	1								
	Near lot E.....	1		1						
Oak Lake av.	Near lot G. or angle.....	1								
	N'r Johnson's Lake.....	1								
	Hennepin av.....	1 SW		1 E						
	6th av. N.....			1 N						
Oak st.....	17th av. N.....	1 SW								
Park av.....	Marshall st.....									
	S. 10th st.....	1 SW								
	Waters									
	E 14th st.....			2 N & S						
	E 15th st.....	1 NW								
	E 16th st.....	1 NW								
	E 17th st.....	1 NW		1 S						
	E 18th st.....	1 NW								
	E 19th st.....	1 NW								
	E Franklin av.....	1 SW		2 N & S						
	Half way.....	1								
	E 22d st.....	1 NW								
	Half way.....	1								
	E 24th st.....	1 NW		1 N						
	E 25th st.....	1 NW								

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
Park av.....	E 26th st.....	1 NW (waters)		1 N						
	Half way.....	1								
	E 27th st.....	1 NW		2 N & S						
	E 28th st.....	1 NW								
	E 29th st.....	*1 NW		*1 N						
	E Lake st.....	1 NW		1 N						
Pleasant av..	W 24th st.....	1 SW			1 S					
	W 25th st.....	1 NW								
	W 26th st.....	1 SW			1 S					
	W 27th st.....	1 NW								
	W 28th st.....	1 NW			1 S					
	W 29th st.....	1 NW								
	W 29½ st.....	1 NW								
	W Lake st.....	1 SW			1 S					
	W 31st st.....	1 NW								
	W 32d st.....	1 NW			1 S					
	W 33d st.....	1 NW								
Plymouth av.	River bank..	1 W		1 W						
	N 1st st.....	1 NW								
	N 2d st.....	1 NW			1 E			1 W		
	Wash. av.....	1 NW						1 W		
	N 3d st.....	1 NW						1 W		
	N. 5th st.....	1 NW								
	N 6th st.....	1 NW				1 W				
	Lyndale av..	1 NE			1 E					
Portland av..	E 14th st.....	1 SW								
	E 15th st.....	1 SW								
	E 16th st.....	1 SW					1			
	E 17th st.....	1 SW								
	E 18th st.....	1 SW								
	E 19th st.....	1 SW								
	E Fr'nklin av.	1 NW						2 N & S		
	E 22d st.....	1 NW								
	E 24th st.....	1 SW						1 N		
	E 25th st.....	1 NW								
	E 26th st.....	1 NW								
	E 27th st.....	1 NW					2 N & S			
	E 28th st.....	1 NW								
	E 29th st.....	1 NW								
	E Lake st.....	1 SW			1 S		1 N			
	E 31st st.....	1 NW								
	E 32d st.....	1 NW								
	E 33d st.....	1 NW			1 N					
Queen av.....	Kenwo'd b'y'd			1 S						
	All'y in line of Franklin av	1 NW								
	W 21st st.....	1 NW								
Ridgewood av	Lindley av..	1 SW								
	Water.....									
	First angle...	1								
	Pleasant av..	1 SW			2 E & W					
	Third way.....	1								
	2-thirds way..	1								
Riverside av..	Lyndale av..	1 SE			1 E					
	21st av S.....	1 NE								
	22d av S.....	1 NE						1 E		
	23d av S.....	1 NE								
	24th av S.....	1 NE								
	25th av S.....							1 W		
Royalston av.	Western av N									
	of 12th st.....			1 N						
	R R bridge.....			1 N						
	Holden st.....	1 NW			1 S					
	Hoag av.....	1 SE								
	Highland av..	1 NE			1 N					
	Valley av.....	1			1 E					
N 2d st.....	Hennepin av.			1 N						
	1st av N.....	1 SW								
	2d av N.....	1 NW								
	Plymouth av.	1 SW						2 N & S		
	14th av N.....	1 SW						2 N & S		
	15th av N.....	1 SW								
	16th av N.....	1 SW								
	17th av N.....	1 SW						1 S		

*North of R. R. tracks.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OR STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
N. 2d st.....	18th av N.....	1 SW								
	19th av N.....	1 SW								
	20th av N.....	1 SW						1 S	1 N	
	24th av N.....									1 S
	31st av N.....									1 S
	37th av N.....									1 S
S 2d st.....	41st av N.....	1 NW		*1 N						1 S
	1st av S.....	1								
	2d av S.....	1 SE								
	3d av S.....	1 SE		1 S						
	5th av S.....	1 NE		1 N						
	6th av S.....	1 NE						2 N & S		
	7th av S.....	1 SE								
	8th av S.....	1 NE						1 S		
	9th av S.....	1 NE								
	10th av S.....	1 NE								
	11th av S.....	1 NE						1 N		
2d av N..	N. 2d st.....				+1					
	Wash. av.....	1 NW								
	N 3d st.....	1 NW						2 E & W		
	N 4th st.....	1 NE								
	N 5th st.....	1 NW								
	N 6th st.....	1 NW								
	N 7th st.....	1 NE						1 W		
2d av S.....	N 7th st.....	1 NE								
	S 1st st.....	1 SW								
	Wash. av.....			2 E & W						
	S 3d st.....	1 SW		2 E & W						
	S 4th st.....	1 SW								
	S 5th st.....	1 SW		1 W						
	S 6th st.....	1 SW		2 E & W						
	S 7th st.....	1 SW		1 W						
	S 8th st.....	1 SW								
	S 9th st.....	1 SW								
	Flush									
	S 10th st.....			2 E & W						
	S 11th st.....	1 SW								
	S 12th st.....	1 SW								
	S 13th st.....	1 SE		2 N & S						
	E Grant st.....	1 SW		1 S						
	E 14th st.....	1 NW		2 N & S						
	E 15th st.....	1 NW								
	E 16th st.....	1 NW								
	E 17th st.....	1 NW		1 S						
	E 18th st.....	1 NW								
	E Franklin av			1 S						
	E 22d st.....	1 NW								
	Waters									
	E 25th st.....			1 S						
	E 26th st.....	1 SW		2 N & S						
	E 27th st.....	1		2 N & S						
	Half way.....	1								
	E 28th st.....	1 NW								
	E Lake st.....	1 SW		1 S						
	Half way.....	1								
	E 31st st.....	1 NW								
	Half way.....	1								
	E 32d st.....	1 NW								
	Half way.....	1								
	E 33d st.....	1 NW		1 N						
E 17th st.....	Portland av.....	1 SE								
	Half way.....	1								
	Park av.....	1 SE		1 W						
	E Franklin av				1 S					
17 av S.....	E 22d st.....	1 NW								
	E 24th st.....	1 NW								
	E 25th st.....	1 NW			2 N & S					
	Half way.....	1								
	E 26th st.....	1 NW								
	E 27th st.....	1 NW			2 N & S					
	E 28th st.....	1 NW								
	Hennepin av.....	1 L'wry			1 S					
S 7th st... ..	Half way.....	1 Lowry								
	Nicollet av.....	1 SE			1 N					
	1st av S.....	1 NE								
	2d av S.....	1 NE			1 S					

*On 6-in. hydrant branch.

*On connection.

*In center of street.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and lo- cation of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
S 7th st.....	3d av S.....	1 NE								
	4th av S.....	1 NE			1 N					
	5th av S.....	1 NE			2 N & S					
	6th av S.....				2 N & S					
	7th av S.....	1 SE								
	8th av S.....	1 SE			1 S					
	9th av S.....	1 SE								
	10th av S.....	1 NE								
	11th av S.....	1 SE			1 S					
	12th av S.....	1 SE								
	13th av S.....	1 SE			1 S					
	14th av S.....	1 NE								
	15th av S.....				1 N					
	20th av S.....	1 NE		1 E						
	21st av S.....	1 NW								
	25th av S.....			1						
7th av N.....	Wash. av.....			1 W						
	N 3d st.....	1 NW		2 E & W						
	N 4th st.....	1 NE		1 E						
	N 5th st.....			1 W						
	N 6th st.....	1 NW								
	Hoag av.....	1 NE								
	Bradford av.....	1 NE								
7th av S.....	Wash. av.....	1 NW		1 W						
	S 3d st.....	1 NW								
	S 6th st.....	1 NW		1 W						
	S 7th st.....			2 E & W						
	S 8th st.....	1 NE								
	S 9th st.....	1 NE								
	S 10th st.....	1 NE		1 E						
SSheridan av.	K'nw'od b'y'd			1 W						
	S line of alley									
	to east.....	1 SW								
	W Fr'nklin av	1 NW								
	W 21st st.....	1 SE								
16th av N.....	N 5th st.....	1 NE								
	N 6th st.....	1 NE								
	Lyndale av.....	1 NE		2 E & W						
	Aldrich av.....	1 NE								
	Waters.....									
	Bryant av.....	1 NE								
	Dupont av.....	1 NE								
	Emerson av.....			1 E						
16th av S.....	S 8th st.....			1 W						
	S 9th st.....	1 NE								
	E 18th st.....	1 NW								
		Flush								
	E 19th st.....	1 NW								
		Flush								
	E Fr'nklin av	1 NW		2 N & S						
	Half way.....	1								
	E 22d st.....	1 NW								
N 6th st.....	Hennepin av			1 N						
	1st av N.....	1 SE		1 S						
	12th av N.....	1 SE								
	Plymouth av	1 SE		2 N & S						
	14th av N.....	1 SW		2 N & S						
	15th av N.....	1 SW								
S 6th st.....	16th av N.....	1 SW								
	Hennepin av.	1 SE		1 S						
	Half way.....	1								
	Nicollet av.....	1 SE		1 N		1 S				
	Alley.....	1 NE								
	1st av S.....	1 NE								
	2d av S.....	1 NE				1 N				
	3d av S.....					1 N	1 S			
	4th av S.....	1 SE								
	5th av S.....	1 NE								
	6th av S.....	1 NE					2 N & S			
	8th av S.....	1 SE								
	9th av S.....	1 SE					1 S			
	10th av S.....	1 SE								
	11th av S.....	1 SE					1 S			
	12th av S.....	1 SE								
	13th av S.....	1 SE								
	14th av S.....	1 SE					1 N			

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
S 6th st.....	15th av S.....	1 SE								
	16th av S.....	1 SE								
	17th av S.....	1 SE					1 S			
	Cedar av.....	1 NW								
6th av N.....	Wash'gton av.....				1 W					
	N 3d st.....	1 SE			2 E & W					
	N 4th st.....				1 E					
	N 5th st.....	1 SE		2 E & W						
	N 6th st.....	1 NE								
	Hoag av.....	1 NE								
	Bradford av.....	1 NE								
	Oak Lake av.....	1 NE								
	Lyndale av.....	1 NE		2 E & W						
	Aldrich av.....	1 NE		1 W						
	Bryant av.....	1 NE								
	Dupont av.....	1 NW								
	Emerson av.....	1 NE		1 W						
	Fremont av.....	1 NE								
	Girard av.....	1 NE								
	Humboldt av.....	1 NE		2 E & W						
	150ft. w. of w. l. of Elwood av	1150ft W								
6th av S.	James av.....	1150ft E								
	S 1st st.....	1 NW					1 W			
	S 2d st.....						1 W			
	Wash. av.....	1 Lowry					2 E & W			
	S 3d st.....	1 NW								
	S 4th st.....	1 NW								
	S 5th st.....	1 NW								
	(Flush)									
	S 6th st.....	1 NW					1 W			
	S 7th st.....	1 NW					2 E & W			
	S 8th st.....	1 NW					1 W			
	(Flush)									
	S 9th st.....	1 NW								
	(Flush)									
	S 10th st.....	1 NE								
Spruce place..	W 14th st.....	1 SW		1 S						
	W 15th st.....	1 NW								
Stevens av....	E Grant st.....	1 SW		1 S						
	E 14th st.....	1 NW		2 N & S						
	E 15th st.....	1 NW								
	E 16th st.....	1 NW								
	E 17th st.....	1 NW		1 N						
	E 18th st.....	1 NW								
	E 19th st.....	1 NW								
	E Franklin av.....			2 N & S						
	Half way.....	1								
	E 22nd st.....	1 NW								
	E 24th st.....			2 N & S						
	E 25th st.....	1 NW		1 S						
	Half way.....	1								
	E 26th st.....	1 NW								
	Half way.....	1								
	E 27th st.....			2 N & S						
	Half way.....	1								
	E 28th st.....	1 NW								
	Half way.....	1								
	E 29th st.....	1 NW								
	Half way.....	1								
	E Lake st.....	1 SW		2 N & S						
	Half way.....	1								
	E 31st st.....	1 NW								
	Half way.....	1								
	E 32d st.....	1 NW		1 S						
	Half way.....	1								
	E 33d st.....	1 NW								
N 10th st.....	Hennepin av.....			1 N						
	Hawthorn av.....	1 NW		2 N & S						
	1st av N.....	1 Lowry		1 S						
S Tenth st....	Hennepin av.....				1 S					
	Mary place.....	1 NE								
	Nicollet av.....	1 NE			1 S					
	1st av S.....	1 NE								
	2d av S.....	1 NW			2 N & S					
	3d av S.....	1 NE			2 N & S					

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
S Tenth st....	4th av S.....	1 NE			*1					
	5th av S.....	1 NE								
	6th av S.....	1 SE			1 N		1 S			
	7th av S.....	1 SE					1 N			
	8th av S.....	1 SE								
	Chicago av.....						1 W			
10th av N.....	Logan av.....	1 NE		1 E						
10th av S.....	River bank.....	1 W		1 W						
	S 2d st.....			1 E						
	E 14th st.....			1 S						
	E 15th st.....	1 NW								
	E 16th st.....	1 NW								
	E 17th st.....	1 NW		1 S						
	E 18th st.....	1 NW								
	E 19th st.....	1 NW								
	E Franklin av.....			1 N						
	1st av N.....	1 SE								
N Third st....	2d av N.....	1 SE						2 N & S		
	3d av N.....	1 SE								
	4th av N.....	1 NE								
		1 SE								
	5th av N.....	1 SE						1 N		
	6th av N.....	1 NE				1 N		1 N		
	7th av N.....	1 SE								
	Bassett's cr'k.....			*1				2 N & S		
	8th av N.....	1 SE								
	9th av N.....	1 SE								
S Third st....	10th av N.....	1 SE						1 N		
	12th av N.....	1 SE								
	Plymouth av.....	1 SE						1 S		
	Hennepin av.....	1 SW								
	Nicollet av.....	1 NW	1 S					1 S		
	1st av S.....	1 SW								
	½ wy. to 2d av.....	1								
	3d av S.....	1 NW						1		
	4th av S.....	1 NW							1 N	
	5th av S.....				#1					
Third av N...	6th av S.....	1 SW		1 S						
	7th av S.....	1 SW								
	8th av S.....	1 SW		1 S						
	9th av S.....	1 SW								
	10th av S.....	1 SW								
	11th av S.....	1 SW		2 N & S						
	12th av S.....	1 SW								
	13th av S.....	1 SW								
	14th av S.....	1 NW		1 N						
	15th av S.....	1 SW								
Third av S....	Cedar av.....	1 SW		1 E						
	N 2d st.....	1 SW		1 W						
	Wash. av.....	1 SE		1 E						
				1 W						
	N 3d st.....	1 NW								
	N 4th st.....	1 NE								
	N 5th st.....	1 NW		1 W						
	N 6th st.....	1 NE								
	½ way 3d to 4th st at alley..	1 NW								
	S 4th st.....	1 NW								
Third av S....	S 5th st.....	1 NW								
	S 6th st.....	1 NW							2 E & W	
	S 7th st.....	1 NW								
	S 8th st.....	1 NW								
	S 9th st.....	1 NW								
	S 10th st.....	1 NW							2 E & W	
	S 11th st.....	1 NE							2 E & W	
	S 12th st.....	1 NE								
	E Grant st.....	1 NW							2 N & S	
	E 14th st.....	1 NW								
Third av S....	E 15th st.....	1 NW								
	E 16th st.....	1 NW								
	E 17th st.....	1 NW							1 S	
	E 18th st.....	1 NW								
	E 19th st.....	1 NW								
	E Franklin av.....	1 NW							2 N & S	
	E 22d st.....	1 NW								
	E 25th st.....	1 NW							2 N & S	

*53½ ft. S. of S. line.

#On waste pipe.

#On 8-in. pipe connecting two 24-in. pipes.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
Third av S....	E 26th st.....	1 NW								
	Half way.....	1								
	E 27th st.....	1 NW							2 N & S	
	Half way.....	1								
	E 28th st.....	1 NW								
	Half way.....	1								
	E 29th st.....	1 NW								
	Half way.....	1								
	E Lake st.....	1							2 N & S	
	E 31st st.....	1 NW								
	E 32d st.....	1 NW								
	E 33d st.....	1 NW							2 N & S	
	Half way.....	1								
	E 34th st.....	1 NW								
	Half way.....	1								
	E 35th st.....	1 NW							1 S	
	Half way.....	1								
	E 36th st.....	1 NW								
	Half way.....	1								
	E 37th st.....	1 NW								
	Half way.....	1								
	E 38th st.....	1 NW							2 N & S	
S 13th st.....	1st av S.....			1 N			1 S			
	2d av S.....						1 S			
13th av S.	Wash. av.....				1 W					
	S 3d st.....	1 NE								
	S 4th st.....	1 NW			1 W					
	S 5th st.....	1 NW								
	S 6th st.....	1 NW			2 E & W					
	S 7th st.....	1 NW								
	S 8th st.....	1 NW			1 W					
	S 9th st.....	1 NW								
	E 17th st.....	1 SW								
	E 18th st.....	1 NW			1 N					
	E 19th st.....	1 NW								
	E Franklin av.....	1 NW			1 N					
30th av N.....	N 2d st.....	1 NW		1 W						
31st av N.....	N 2d st.....	1 NW		1 W						
E 31st st.....	3d av S.....	1 SE		1 E						
	Clinton av.....	1 SW								
32d av N.....	N 2d st.....	1 NW					1 E		1 W	
W 32d st.....	Blaisdell av.....			1 W						
	Lindley av.....	1 SE								
	Pleasant av.....			1 E						
33d av N.....	N 2d st.....	1 NW		1 W						
E 33d st.....	3d av S.....	1 SE					1 E			
	Clinton av.....	1 SE								
	4th av S.....	1 SE								
	5th av S.....	1 SE								
	Portland av.....						1 W			
34th av N.....	N 2d st.....	1 SW			1 W					
35th av N.....	N 2d st.....	1 NW		1 W						
36th av N.....	N 2d st.....				1 E		1 W			
37th av N.....	N 2d st.....	1 NW		1 W						
38th av N.....	N 2d st.....	1 NW			1 W					
39th av N.....	N 2d st.....	1 NW		2 E & W						
Thomas place	James av.....			1 W						
	E line of alley.....	1								
	Logan av.....	1 NE								
N 12th st....	Hawthorn av.....	1 NW		1 N					1 S	
	Half way.....	1								
	Linden av.....			1 N						
S 12th st.....	Hennepin av.....	1 SW								
	Harmon place.....	1 SW								
	Yale place.....	1 NW							1 N	
	Mary place.....	1 SW								
	Nicollet av.....	1 SW								
	1st av S.....	1 NW		1 S					1 N	
	2d av S.....			1 S						
	3d av S.....	1 SW								
12th av N.....	Emerson av.....			1 W						
	Fremont av.....	1 NE								
	Girard av.....	1 NE								
12th av S.....	E 24th st.....				1 S					
	E 25th st.....	1 NW								

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and lo- cation of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
12th av S.....	E 26th st.....	1 NW			1 N					
20th av N.....	River bank.....								1 W	
	Pacific st.....	1 NE								
	N 1st st.....	1 NE								
	N 2d st.....	1 NE								
	Wash'gton av	1 NE			1 E					
	N 3d st.....	1 NE			2 E & W					
	N 4th st.....	1 NE								
	N 6th st.....	1 NE								
	Lyndale av.....	1 NE			2 E & W					
	Aldrich av.....	1 NE			1 W					
	Bryant av.....	1 NE								
	Dupont av.....	1 NE								
	Emerson av.....	1 NE								
	Fremont av.....	1 NE			1 W					
	Girard av.....	1 NE								
	Irving av.....	1 NE								
	James av.....	1 NE			1 E					
20th av S.....	21st av S.....	1 SW								
	S 1st st.....	1 NW								
	S 2d st.....	1 NW								
	Wash. av.....	1 NW		1 N						
	S 5th st.....	1 SW		1 S						
	S 6th st.....	1 NW								
	S 7th st.....	1 NW								
	S 8th st.....	1 NW		1 N						
	S 9th st.....	1 NW								
	E Franklin av.			1 N						
21st av N.....	N 2d st.....	1 NW		2 E & W						
21st av S.....	S 5th st.....	1 SW								
	Riverside av.			1 N						
22d av N.....	N 2d st.....	1 NW			2 E & W					
22d av S.....	Riverside av.				1 S					
	S 7th st.....	1 NW								
	S 8th st.....	1 NW								
	S 9th st.....	1 NW								
	E Franklin av.	1 NW			1 N					
E 22d st.....	25th av S.....	1 SE								
	26th av S.....	1 SE		2 E & W						
	27th av S.....	1 SE								
W 22d st.....	Kenw'd boul.			1 W						
	Sheridan av.....	1 SE								
23d av N.....	N 2d st.....	1 NW		2 E & W						
24th av N.....	N 2d st.....	1 NW		1 W						
E 24th st.....	Nicollet av.....	1 NE		1 E						
	1st av S.....	1 NE								
	Stevens av.....	1 NE								
	2d av S.....	1 NE								
	3d av S.....	1 NE								
	Clinton av.....	1 NE		1 W						
	5th av S.....	1 NE								
	Portland av.....	1 SE		1 W						
	Portland plac	1 SE								
	Park av.....	1 SE								
	Chicago av.....	1 SE								
	9th av S.....	1 SE								
	10th av S.....	1 SE								
	11th av S.....	1 SE			2 E & W					
	12th av S.....	1 SE								
	13th av S.....	1 SE								
	14th av S.....	1 SW								
	15th av S.....	1 SE			1 E					
	Bloomington av	1 SE								
	16th av S.....	1 SE								
	17th av S.....	1 SE								
	18th av S.....	1 SE								
	Cedar av.....	1 SE		2 E & W						
W 24th st.....	Grand av.....	1 SE								
	Hennepin av.....			1 W						
	Emerson av.....	1 SW								
	Fremont av.....	1 SE								
	Girard av.....	1 SE								
	Humboldt av.....	1 SE								
	Irving av.....	1 SE		1 E						
25th av N.....	N 2d st.....	1 NW		1 W						
25th av S.....	Riverside av.....	1 SW		1 S						

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
25th av S.....	S 9th st.....	1 NW								
	E Franklin av	1 NW	2 N & S							
	E 22d st.....	1 NW								
E 25th st.....	Nicollet av.....	1 SE		1 E						
	1st av S.....	1 SE								
	Stevens av.....	1 SE								
	2d av S.....	1 SE								
	3d av S.....	1 SE			2 E & W					
	Clinton av.....	1 SE								
	4th av S.....	1 SE								
	5th av S.....	1 SE		2 E & W						
	Portland av.....	1 SW		1 W						
	Minn'haha av				1 E					
	23d av S.....	1 SE								
	24th av S.....	1 SE								
	25th av S.....	1 SE			1 E					
	26th av S.....	1 SE								
	27th av S.....	1 SE			2 E & W					
	28th av S.....	1 SE								
	29th av S.....	1 SW								
26th av N.....	N 2d st.....	1 NW			1 E		1 W			
	W'shingt'n av	1 NE								
	N 3d st.....	1 NE					1 W			
	N 4th st.....	1 NE								
	N 6th st.....	1 NE								
	Lyndale av.....	1 NE					2 E & W			
E 26th st.....	12th av S.....	1 SE								
	13th av S.....	1 SE								
	14th av S.....	1 SW								
	15th av S.....	1 SE								
	Bloomg'tn av	1 SE					1 E			
	16th av S.....	1 SE								
	17th av S.....	1 SE								
	18th av S.....	1 SE								
27th av N.....	Cedar av.....						1 W			
	N 2d st.....	1 NW		1 W						
27th av S.....	E 25th st.....				1 S					
	E 26th st.....	1 NW								
	E 27th st.....	1 NW								
	E 28th st.....	1 NW			1 S					
	E 29th st.....	1 NW								
	E Lake st.....			1 N						
W 27th st.....	Nicollet av.....	1 SE					1 E			
	1st av S.....	1 SE								
	Stevens av.....	1 SE								
	2d av S.....	1 SE								
	3d av S.....	1 SE					2 E & W			
	Clinton av.....	1 SE								
	4th av S.....	1 SE								
	5th av S.....	1 SE								
	Portland av.....	1 SE					2 E & W			
	Blaisdell av.....	1 SE								
	Lindley av.....	1 SE					1 E			
E 27th st.....	Pleasant av.....	1 SE								
	Grand av.....	1 SE								
	Harriet av.....	1 SE								
	Garfield av.....	1 SE								
	Lyndale av.....	1 SE					1 E			
	Aldrich av.....	1 SE								
	Bryant av.....	1 SE								
	Colfax av.....	1 SE								
	Dupont av.....	1 SE					1 E			
	Emerson av.....	1 SE								
W 27th st.....	Fremont av.....	1 SE								
	Girard av.....	1 SE								
	Hennepin av.....						1 E			
28th av N.....	N 2d st.....	1 NW		2 E & W						
	Chicago av.....	1 SE			1 E					
	9th av S.....	1 SE								
	10th av S.....	1 SE								
	11th av S.....	1 SE			2 E & W					
	12th av S.....	1 SE								
	13th av S.....	1 SE								
	14th av South	1 SW			1 W					
	15th av S.....	1 SE								
	Bl'm'ngt'n av				1 W					

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
20th av N....	N 2d st....	1 NW			1 W					
2½ st.....	Cedar av....	1 SE		1 E						
	19th av. S....	1 SE								
	20th av. S....	1 SW								
Vine place...	Oak Grove st.			1 S						
	Clifton av....	1 NW								
	W 19th st....	1 NW								
	W Franklin av			1 N						
Wash. av N...	Hennepin av.	1 Lowry		1 N						
	1st av N....	1 NW								
	2d av N....	1 NW		2 N & S						
	3d av N....	1 NW								
	4th av N....	1 SW		1 S						
	5th av N....	1 SW								
	6th av N....	1 NW				2 N & S				
	7th av N....	1 NW				*1 N				
	8th av N....	1 NW				*1 S				
	9th av N....	1 NW								
	10th av N....	1 NW								
	12th av N....	1 NW								
	Plymouth av.				1 N	1 S				
	14th av N....	1 SW								
	15th av N....	1 SW			1 N					
	16th av N....	1 SW								
	17th av N....	1 SW								
	18th av N....	1 SW								
	19th av N....	1 SW								
	20th av N....	1 SW			2 N & S					
	21st av N....	1 SW								
	22d av N....	1 SW								
	23d av N....	1 SW			1 N					
	24th av N....	1 SW								
	25th av N....	1 SW								
	26th av N....	1 SW			2 N & S					
	27th av N....	1 SW								
	28th av N....	1 SW								
	29th av N....	1 SW			1 N					
	30th av N....	1 SW								
Wash. av S...	Hennepin av.						1 S			
	Nicollet av....						2 N & S			
	1st av S....	1 Lowry								
	2d av S....	1 Lowry								
	3d av S....	1 SW								
		Lowry					1 S			
	4th av. S....	1 SW								
		Lowry								
	5th av. S....						2 N & S			
	6th av S....	1 SW					2 N & S			
	7th av S....	1 SW								
	8th av S....	1 SW		#1			1 S			
	9th av S....	1 SW								
	10th av S....	1 SW								
	11th av S....	1 SW								
	Flush....					1 S				
	12th av S....	1 SW								
	13th av S....	1 SW								
		Lowry				1 S				
	14th av S....	1 SW								
	Cedar av....	1 SW		1 E		1 W				
		1 SE								
	19th av S....	1 SE								
	20th av S....	1 SE								
	21st av S....	1 SW								
Western av...	N. 9th st....	1 NE		2 E & W						
	N 10th st....	1 NE								
	N 11th st....	1 NW								
	N 12th st....	1 NE								
	R. R. bridge..	§1 E			2 E & W					
	Border av....	1 NE								
	Lakeside av..	1 NE								
	Lyndale av....	1 NE			1 W					
	Aldrich av....	1 NE								
	Bryant av....	1 NE								
	Bassett's ck..	1 E		1 E						
	Dupont av....	1 NE								

* North of north line. † South of south line. ‡ Into sewer. § East side of. ¶ Waste.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and lo- cation of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
Western av...	Emerson av...	1 NE			1 E					
	Fremont av...	1 NE								
	Girard av...	1 NE								
	Humboldt av...	1 NE			1 W					
	Irving av...	1 NE								
	James av...	1 NE								
	Knox av...	1 NE								
	Logan av...	1 NE			1 E					
	Morgan av...	1 NE								
	Newton av...	1 NE								
	Oliver av...	1 NE								
	Penn av...	1 NE			2 E & W					
	Queen av...	1 NE								
	Russell av...	1 NE								
	Willow st.....	Harmon pl...	1 SE		1 S					
Yale place...		1 NE								
Angle.....		1 N of								
W. Grant st...		1 SE		2 N & S						
Total...		1,431	3	427	217	20	106	55	51	4

EAST SIDE.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OR STREET ON WHICH SITUATED.								
			4	6	8	10	12	16	24	36	
Adams st....	4th av NE....			1 N							
	Half way....	1									
	Spring st....	1 SW									
	Half way....	1									
	Summer st....	1 SW									
	Half way....	1									
	Broadway....	1 SW		2 N & S							
	Half way....	1									
	13th av NE....	1 SW		1 S							
	Half way....	1									
	15th av NE....	1 SW		1 S							
	Half way....	1									
	17th av NE....	1 SW									
Alley in b 2 on Nic. Island.	Maple st....	1 SW									
Alley in b. 1 on Nic. Isl }	} About 66ft N			1							
	} of Maple st										
Alley in b 3 on Nic. Isl }	Maple st....	1 NW									
	} About 80ft N										
Bridge st....	} of R'y sh'ft			1							
	Isl. av at w s.	1 NE						1 W			
Broadway....	Isl. av at e s.	1 NW									
	Main st....	1 NE			1 E						
	2d st NE....	1 NE									
	3d st NE, nw'd	1 NE									
	3d st NE, sw'd			2 E & W							
	4th st NE....	1 NE									
	4½ st NE....	1 NE									
	5th st NE....	1 NE									
	6th st NE, nwd	1 NE			1 E						
	Washing'tn st	1 NE									
	Adams st....	1 NE									
	Jefferson st	1 NE			1 E						
	Madison st....	1 NE									
	Monroe st....	1 NE									
	Quincy st....	1 NE									
	Jackson st....	1 NW									
	Harrison st....	1 NW			1 W			1 E			
	Cambridge st	Prospect st....	1 NE					1 E			
		Pleasant st....	1 NE								
		State st....	1 NE								
Church st....		1 NE									
Union st....		1 NE					1 W				
Harvard st....		1 NE									
Walnut st....		1 NE									
Oak st.....							1 W				

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No and loca- tion of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
Central av....	Main st.....	1 NE						1 E		
	2d st.....	1 NE								
	4th st.....	1 NW					1 E			
	5th st.....	1 NE								
	6th st.....	1 NE								
	7th st NE.....	1 NW								
	8th st SE.....	1 NE								
Central av....	9th st NE.....	*1								
	9th st SE.....			1 W						
	10th st NE.....	1 NW								
	10th av SE.....	1 E of NE								
	11th av SE.....	1 NE								
	12th av SE.....	1 NE					1 W			
	13th av SE.....	1 NE								
Como av.....	14th av SE.....	1 NE								
	15th av SE.....	1 NE					1 E			
	Tuttle st.....	1 NE								
	16th av SE.....	1 NE								
	Oak st.....	1 NW								
	Harrison st.....	1 NE					1 E			
	Tyler st.....	1 NE								
	Polk st.....	1 NE								
	Taylor st.....			1 W						
	Fillmore st.....	1 NW								
	Pierce st.....	1 NE								
	Buchanan st.....	1 NE					1 W			
	Lincoln.....	1 NE								
	Johnson st.....	1 NE								
	11th av SE.....	1 NE					1 W			
	12th av SE.....	1 NE								
8th st SE.....	13th av SE.....	1 NW								
	Central av.....	1 SW		1 S						
	2d av SE.....	1 SW								
	3d av SE.....	1 SW		2 N & S						
	4th av SE.....	1 SW								
	5th av SE.....	1 NW								
	Sibley st.....	1 NE								
8th av NE.....	Ramsey st.....	1 NE								
	Marshall st.....	1 NE			1 E					
	Main st.....	1 NE								
	2d st NE.....	1 NE			1 W					
	3d st NE.....				1 W					
	Monroe st.....	1 NE			1 E					
	Quincy st.....	1 NE								
18½ av NE.....	Jackson st.....	1 NE								
	Harrison st.....				1 W					
	Ramsey st.....	1 NE			1 E					
	Marshall st.....	1 NE								
	Main st.....				1 W					
	5th st SE.....	1 NE		1 E						
	6th st SE.....	1 NE								
15th av SE.....	7th st SE.....	1 NW								
	8th st SE.....	1 NW		1 W						
	Rollins av.....	1 SW								
	Brook av.....	1 SW								
	Como av.....	1 SW		2 N & S						
	½ way.....	1								
	Talmadge av.....	1 SW								
	Division st.....	1 SW		1 S						
	Central av.....	1 N								
	1st av NE.....	1 SE								
	2d av NE.....	1 SE		1 N						
	3d av NE.....	1 SE								
5th st NE.....	4th av NE.....	1 SE			1 N					
	Alley.....	1 NE								
	6th av NE.....	1 NE			1 N					
	7th av NE.....	1 SE								
	8th av NE.....	1 SE								
	9th av NE.....	1 SE			1 S					
	Central av.....						1 S			
	1st av SE.....	1 SW								
	2d av SE.....	1 SW					2 N & S			
	3d av SE.....	1 SW								
	4th av SE.....	1 SW								
	5th av SE.....	1 SW					1 N			
5th st SE.....	6th av SE.....	1 SW								
	7th av SE.....	1 SW								

*Opposite center.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No and loc- ation of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
5th st SE.....	Half way.....			1						
	8th av SE.....	1 SW								
	9th av SE.....	1 SW								
	10th av SE.....	1 SW								
	11th av SE.....	1 SW								
	12th av SE.....	1 SW		1						
	13th av SE.....	1 SW								
	14th av SE.....	1 NW		1 N						
	15th av SE.....	1 SW					1 S			
	16th av SE.....	1 NW					1 S			
5th av SE.....	4th st SE.....			1 E						
	7th st SE.....			1 E						
	9th st SE.....	1 NE								
	Division st.....			1 S						
14th av SE.....	3d st SE.....	1 SE								
	4th st SE.....						1 E			
	5th st SE.....	1 NE								
	6th st SE.....	1 NE					1 E			
	7th st SE.....	1 NW								
	8th st SE.....	1 NE					1 W			
	Rollins av.....	1 SW								
	Brook av.....	1 SW								
	Como av.....	1 SW					1 S			
4th st NE.....	Central av.....	1 NE		1 N						
	1st av NE.....	1 SW								
	2d av NE.....	1 SW								
	3d av NE.....	1 SW								
	4th av NE.....	1 SW		1 S						
	5th av NE.....	1 SW								
	6th av NE.....	1 SW		1 N						
	7th av NE.....	1 SW								
	8th av NE.....	1 SW								
	9th av NE.....	1 SW								
	Broadway.....	1 SW		1 S						
4th st SE.....	Central av.....						1 S			
	1st av SE.....	1 NE								
	2d av SE.....	1 NE								
	3d av SE.....	1 NE					2 N & S			
	4th av SE.....	1 NE								
	5th av SE.....	1 NE					1 N			
	6th av SE.....	1 NE								
	7th av SE.....	1 NE								
	8th av SE.....	1 NE								
	9th av SE.....	1 NE								
	10th av SE.....	1 NE					1 N			
4th st SE.....	11th av SE.....	1 NE								
	12th av SE.....	1 NE								
	13th av SE.....	1 NE								
	14th av SE.....	1 NE			1 S		1 N			
	16th av SE.....	1 SE								
	17th av SE.....	1 NE					2 N & S			
	18th av SE.....	1 NE								
	19th av SE.....	1 NE								
4th av NE.....	Oak st.....	1 NE					1 N			
	Main st.....	1 NE			1 E					
	2d st NE.....	1 NE								
	3d st NE.....				1 W					
Harrison st.....	3d av SE or Division st.....								1 N	
	Winter st.....	1 SW								
	2d av NE.....	1 NW								
	3d av NE or Spring st.....	1 SW							1 S	
	Summer st.....	1 SW								
	Broadway.....	1 SW						2 N & S		
	12th av NE.....	1 SW								
	13th av NE.....	1 SW								
	14th av NE.....	1 SW							1 S	
	18½ av NE.....	1 NW								
	20th av NE.....	1 SW								
	21st av NE.....	1 SW								
	22d av NE.....	1 SW							2 N & S	
	23d av NE.....	1 SW								
	24th av NE.....	1 SW								
	25th av NE.....	1 SW							1 S	
sland av or W S. Nicollet Is	Bridge st.....				*1					

*7 ft. 8 in. north of Central avenue pipe.

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
Is. av or w Nic.	Eastman av..	1 NE								
	Grove st..	1 NE								
	121.3 ft. N of Grove st..				1					
Jackson st...	N of R R..	1								
	3d av NE....	1 NW								
	Spring st....	1 SW			1 N					
	Summer st....	1 SW								
Jefferson st...	Broadway....	1 SW			1 S					
	Summer st....	1 NW								
	Broadway....	1 SW			1 S					
	13th av NE....	1 SW								
Madison st...	15th av NE....	1 SW			2 N & S					
	17th av NE....	1 SW								
	4th av NE....	1 SW		1 N			1 S			
	Half way....	1								
	Spring st....	1 SW								
	Half way....	1								
	Summer st....	1 NW								
	Broadway....			1						
Main st NE...	Central av....	1 NW		1 N						
	1st av NE....	1 SE								
	2d av NE....	1 SE								
	3d av NE....	1 SE		1 N						
	4th av NE....	1 SE								
	5th av NE....	1 SE								
	6th av NE....	1 SE		1 S						
	7th av NE....	1 NW								
	8th av NE....	1 SW		1 N						
	9th av NE....	1 SW								
	10th av NE....	1 SW								
	Broadway or									
	11th av NE....	1 SW		1 S	1 N					
	12th av NE....	1 SW								
	13th av NE....	1 SW			2 N & S					
	14th av NE....	1 SW								
	15th av NE....	1 SW								
	16th av NE....	1 SW			1 S					
	17th av NE....	1 SW								
	18th av NE....	1 SW			1 S					
Main st SE...	2d av SE....	1 SE								
	3d av SE....	1 NE			1 N					
M'rsh'll st NE	13th av NE....			1 N						
	14th av NE....	1 SW								
	Half way....	1								
	15th av NE....	1 SW		1 S						
	16th av NE....	1 SW								
	Half way....	1								
	18th av NE....	1 SW		1 N						
	1-Third way..	1								
	2-Thirds way..	1								
	2d av NE....	1 SW		1 S						
	Oak st....	1 NE					1 E			
	21st av SE....	1 NE								
	22d av SE....	1 NE								
	22½ av SE....	1 NE					1 W			
	23d av SE....	1 NE								
	24th av SE....	1 NE								
	25th av SE....	1 NE								
	W of R R..						1			
Monroe st...	Summer st....	1 NW								
	Half way....	1								
	Broadway....			1 S	1 N					
	Half way....	1								
	13th av NE....	1 SW								
	15th av NE....	1 SW			1 S					
	17th av NE....	1 SW								
	18th av NE....	1 op NE								
	18½ av NE....				1 S					
	9th av SE....			1 S						
	10th av SE....	1 NW		1 N						
	7th st SE....	1 E		1 E						
	8th st SE....	1 NE								
	9th st SE....	1 NE								
	E. of tracks...	1								
	4th st SE....						1 S			
Oak st.....	Arlington st..	1 SW								
	Beacon st....	1 SW								

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
Oak st.....	Cambridge st.	1 NW					1 N			
Prospect st.....	Cambridge st.			1 S						
	Delaware st..	1 SE		1 W						
2d st NE.....	Central av..				1 N					
	1st av NE.....	1 SW								
	2d av NE.....	1 SW								
	3d av NE.....	1 SW								
	4th av NE.....				2 N & S					
	5th av NE.....	1 SW								
	6th av NE.....	1 SW								
2d st NE.....	7th av NE.....	1 SW			1 N					
	8th av NE.....	1 SW								
	9th av NE.....	1 SW								
	10th av NE.....	1 SW								
	Broadway.....				1 S					
2d st SE.....	Central.....			1 S						
	Bank st.....									
7th st SE.....	Central av..	1 NW		1 S						
	2d av SE.....	1 NW								
	3d av SE.....	1 NW		2 N & S						
	4th av SE.....	1 SE								
	5th av SE.....	1 NE								
	6th av SE.....	1 NE		1						
	7th av SE.....	1 NE		1						
	8th av SE.....	1 NE								
	9th av SE.....	1 NE		1						
	10th av SE.....	1 NE		2 N & S						
	11th av SE.....	1 SE								
	12th av SE.....	1 SE								
	13th av SE.....	1 SE			1 S					
	14th av SE.....	1 SE		2 N & S						
	15th av SE.....	1 SE								
	16th av SE.....	1 NE								
7th av SE.....	5th st SE.....			1 N						
	6th st SE.....	1 NE		1 E						
	7th st SE.....	1 NW								
	8th st SE.....	1 NW								
Sibley st.....	8th av NE.....				1 N					
	9th av NE.....	1 SW								
	10th av NE.....	1 SW								
	11th av NE.....	1 SW			2 N & S					
	12th av NE.....	1 SW								
	13th av NE.....	1 SW			1 S					
16th av SE.....	3d st SE.....	1 NE								
	4th st SE.....	1 NW		1 W			1 E			
	Como av.....			1 N						
6th st SE.....	Talmadge av.	1 SW								
	Central av..	1 SW		1 S						
	2d av SE.....	1 SW								
	3d av SE.....	1 SW		2 N & S						
	4th av SE.....	1 SW		1 N						
	5th av SE.....	1 SW								
	6th av SE.....	1 SW								
	7th av SE.....	1 SW		1 N						
	8th av SE.....	1 SW								
	9th av SE.....	1 SW								
	10th av SE.....	1 SW		2 N & S						
	11th av SE.....	1 SW								
	12th av SE.....	1 SW								
	13th av SE.....	1 SW			1 S					
	14th av SE.....	1 SW		2 N & S						
	15th av SE.....	1 SW		1 N						
	16th av SE.....	1 NW								
6th av NE.....	Marshall st..	1 NE		1 E						
	Main st.....	1 NE								
	2d st NE.....	1 NE								
	3d st NE.....			1 W						
Spring st.....	Harrison st..	1 NE				1 E				
	Tyler st.....	1 NE								
	Polk st.....	1 NE								
	Taylor st.....	1 NE				1 W				
	Fillmore st..	1 NE								
	Pierce st.....	1 NW								
State st.....	Beacon st.....	1 NW								
	Cambridge st			1 N						
Taylor st.....	Division st..	1 NW								
10th st NE.....	3d av NE.....	1 SW								
3d st NE.....	Central av..	1 NE					1 N			
	1st av NE.....	1 NE								

Table No. 5—Continued.

STREET OR AVENUE OF PIPE.	INTERSECTING STREET.	No. and location of hydrants.	NO. OF GATES AND SIDE OF STREET ON WHICH SITUATED.							
			4	6	8	10	12	16	24	36
Third st NE..	2d av NE.....	1 NE								
	3d av NE.....	1 NE								
	4th av NE.....	1 NE								
	5th av NE.....	1 NE								
	6th av NE.....	1 SE					1			
	7th av NE.....	1 NE								
	8th av NE.....	1 NE								
	9th av NE.....	1 NE								
	10th av NE. or Broadway..	1 SE					1 S			
Third st SE..	Central av.....	1 SW					1 S			
	1st av SE.....	1 NW								
	2d av SE.....	1 SW								
	3d av SE.....	1 NW		1 S			1 N			
	4th av SE.....	1 NE								
	5th av SE.....	1 NE								
	6th av SE.....	1 NE								
	7th av SE.....	1 NE		1						
	8th av SE.....	1 NE								
	9th av SE.....	1 NE								
	10th av SE.....	1 NE								
	11th av SE.....	1 NE								
	12th av SE.....	1 NE								
	13th av SE.....	1 NE								
	14th av SE.....	1 SW		1						
	15th av SE.....	1 NE								
3d av NE.....	5th st NE.....				1 E					
	Madison st.....	1 NE								
	Monroe st.....	1 NE								
	Quincy st.....	1 NE			1 E					
	Jackson st.....	1 NE								
	Van Buren st.....	1 NE								
3d ave SE.....	On Hen. Isl nd in pump hse								1	
	Main st.....	1 SE								
	2d st SE.....	*1 NE								
		*1 SW								
	3d st SE.....	1 NE								
	4th st SE.....								2 E & W	
	5th st SE.....	1 NE								
	6th st SE.....	1 NE								
	7th st SE.....	1 NW							1 W	
	8th st SE.....	1 NE								
	9th st SE or Division st.									
13th av NE....	Bank of river								1 W 1 E	
	River st.....	1 NE								
	Ramsey st.....	1 NE								
	Marshall st.....	1 NE						1 E	1 W	
	Grand st.....	1 NE								
	Main st.....							1 W		
	Jefferson st.....	1 NE		1 E						
	Madison st.....	1 NE								
	Monroe st.....			1 W						
13th av SE....	4th st SE.....			1 W						
	6th st SE.....	1 NE		1 E						
	7th st SE.....	1 NW		1 W						
	Como av.....			1 N						
	Half way.....	1								
	Talmadge av.....	1 SW								
	Half way.....	1								
	Division st.....			1 S						
Tuttle st.....	Como av.....			1 N						
	Talmadge av.....	1 SW								
Van Buren st.	Broadway.....	1 NW		1 N						
	12th av NE.....	1 SW								
Wilder st on Nic. island in tunnel...	Bridge st.....				1 S					
	350 ft. south ..	2								
Total....		1,794	3	514	270	20	147	61	66	4

*On parallel pipe.

†From 8-inch pipe alongside of 24-inch pipe.

Summary.

Combination fire and sprinkling hydrants, 3; Lowry hydrants, 12; water hydrants, 7; flush hydrants, 14; post hydrants, 1,757.

Table No. 6.

Showing Number and Location of Sprinkling Stand Pipes (West Side.)

First street and	Second avenue south.
" "	" " Sixth avenue south.
" "	" " First avenue north.
" "	" " Third avenue north.
" "	" " Fourth avenue north.
" "	" " Eighth avenue north.
Second street and	Third avenue south.
" "	" " Tenth avenue south.
" "	" " Fourteenth avenue south.
" "	" " Plymouth avenue north.
" "	" " Sixteenth avenue north.
" "	" " Twentieth avenue north.
" "	" " Twenty-third avenue north.
First avenue south between second and Washington avenues.	
Washington avenue and	Fourth avenue south.
" "	" " Eighth avenue south.
" "	" " Thirteenth avenue south.
" "	" " Fifteenth avenue south.
" "	" " Nineteenth avenue south.
" "	" " Cedar avenue south.
" "	" " Twenty-first avenue south.
" "	" " Second avenue north.
" "	" " Fifth avenue north.
" "	" " Seventh avenue north.
" "	" " Eighth avenue north.
" "	" " Twelfth avenue north.
" "	" " Fifteenth avenue north.
" "	" " Eighteenth avenue north.
" "	" " Twenty-second avenue north.
" "	" " Twenty-sixth avenue north.
" "	" " Thirtieth avenue north.
Third street and	second avenue south.
" "	" " Ninth avenue south.
" "	" " Eleventh avenue south.
" "	" " Third avenue north.
" "	" " Ninth avenue north.
Fourth street and	Third avenue south.
" "	" " Sixth avenue south.
" "	" " Fifteenth avenue south.
" "	or Riverside and Twenty-second avenue.
" "	and Hennepin avenue.
" "	" " Second avenue north.
" "	" " Sixth avenue north.
" "	" " Tenth avenue north.
" "	" " Sixth avenue north.
" "	" " Plymouth avenue north.
" "	" " Sixteenth avenue north.
" "	" " Twentieth avenue north.
Fifth street and	Eighth avenue south.
" "	" " Eleventh avenue south.
" "	" " Cedar avenue south.
" "	" " Twentieth avenue south.
" "	" " Third avenue north.
" "	" " Seventh avenue north.
" "	" " Tenth avenue north.
Sixth street and	Second avenue south.
" "	" " Sixth avenue south.
" "	" " Thirteenth avenue south.
" "	" " Twelfth avenue north.
" "	" " Oak Lake avenue.
Seventh street and	First avenue south.
" "	" " Fourth avenue south.
" "	" " Seventh avenue south.
" "	" " Eleventh avenue south.
" "	" " First avenue north.
" "	" " Twenty-first avenue south.
Lyndale and	Western avenues.
" "	" " Highland avenues.
" "	" " Eighth avenue north.
" "	" " Twenty-fourth street.
" "	" " Twenty-fifth and Twenty-sixth streets.
" "	" " Thirty-second street.
Lyndale avenue between Laurel and Hawthorne.	
Eighth street and	Nicollet avenue.
" "	" " Third avenue south.
" "	" " Fourteenth avenue south.
" "	" " Cedar avenue.
" "	" " Fourth avenue north.
" "	" " Twelfth avenue south.
" "	" " Seventeenth avenue south.
Aldrich and	Eleventh avenue north.

Ninth street and Fifth avenue south.
 " " " Seventh avenue south.
 " " " Eighth avenue south.
 Aldrich and Eleventh avenue north.
 Nith street and seventh avenue south.
 Bryant and Sixth avenue north.
 Bryant avenue and Twentieth avenue north.
 Tenth street and First avenue south.
 " " " Fourth avenue south.
 " " " Chicago avenue.
 " " " Hennepin avenue.
 Eleventh street and Western avenue.
 Emerson and Western avenue.
 Emerson and Plymouth avenues.
 Twelfth street and Nicollet avenue.
 " " " Third avenue south.
 " " " Hennepin avenue.
 " " " First avenue north.
 Girard avenue and Twentieth avenue north.
 Grant street and Nicollet avenue.
 " " " Stevens avenue.
 " " " Sixth avenue south.
 " " " Sixth avenue north.
 Thirteenth avenue south between Tenth and eighteenth streets.
 Fourteenth street and Spruce place.
 Fourteenth street and Hennepin avenue.
 Fifteenth street and fourth avenue south.
 " " " Park avenue.
 " " " Eleventh avenue south.
 Sixteenth street and Harmon place.
 " " " Stevens avenue.
 " " " Linden avenue.
 " " " Third avenue south.
 Sixteenth avenue north and Lyndale.
 Sixteenth avenue north and Dupont.
 Seventeenth street and Oak Grove street.
 " " " Nicollet avenue.
 " " " Sixth avenue south.
 " " " Hennepin avenue.
 " " " Groveland avenue.
 Eighteenth street and Fourth avenue south.
 " " " Chicago avenue.
 " " " Hawthorne avenue.
 " " " Fifteenth avenue south.
 Nineteenth street and Stevens avenue.
 Nineteenth street and Ninth avenue south.
 Franklin avenue and Twenty-fifth avenue south.
 " " " Nicollet avenue.
 " " " Third avenue south.
 " " " Park avenue.
 " " " Eleventh avenue south.
 " " " Sixteenth avenue south.
 " " " Cedar avenue.
 " " " Minnehaha avenue.
 " " " Twenty-second avenue south.
 " " " Hennepin avenue.
 Twenty-second street and Fourth avenue south.
 " " " Sixth avenue south.
 " " " Chicago avenue.
 Twenty-third street and Kenwood boulevard.
 Twenty-fourth street and Fourth avenue south.
 " " " Tenth avenue south.
 " " " Thirteenth avenue south.
 " " " Stevens avenue.
 " " " Third avenue south.
 " " " Bloomington avenue.
 " " " Cedar avenue.
 " " " Hennepin avenue.
 Twenty-fifth street and Sixth avenue south.
 Twenty-fifth street and Park avenue.
 Twenty-sixth street and Nicollet avenue.
 " " " Cedar avenue.
 " " " Bloomington avenue.
 " " " Chicago avenue.
 Twenty-seventh street and Dupont avenue south.
 " " " Lyndale avenue south.
 " " " Pleasant avenue south.
 " " " Stevens avenue south.
 " " " between Fifth and Sixth avenues south
 " " " and Park avenue.
 " " " Hennepin avenue.
 Twenty-eighth street and Cedar avenue.
 Thirty-second street and Hennepin avenue.
 Thirty-second street and Stevens avenue.
 Lake street and Dupont avenue.
 " " " Lyndale avenue.

Lake street and Pleasant avenue.
 " " " Nicollet avenue.
 " " " Third avenue south.
 " " " Chicago avenue.
 " " " Sixth avenue south.
 " " " Fourteenth avenue south.
 " " " Cedar avenue.
 Minnehaha and Twenty-fourth street.
 Pleasant avenue and Twenty-fifth street.
 Pleasant avenue and Thirty-second street.
 Clinton avenue and Twenty-sixth street.
 Nicollet avenue and Twenty-eighth street.
 Oak Lake avenue and Eighth avenue north.
 Aldrich avenue and Eleventh avenue north.
 Bryant avenue and Sixth avenue north.
 Bryant avenue and Twentieth avenue north.
 Dupont avenue and Eighteenth avenue north.
 Emerson avenue and Western avenue.
 Emerson avenue and Plymouth avenue.
 Girard avenue and Twentieth avenue north.
 Kenwood boulevard and Sheridan avenue.
 Kenwood boulevard and Mount Curve avenue.
 Logan avenue and Western avenue.
 Ridgwood avenue and Lyndale avenue.
 Royalston and Hoag avenues.
 Royalston and Highland avenues.
 Royalston avenue north of bridge.
 Riverside avenue and Twenty-fifth avenue south.

EAST SIDE SPRINKLING HYDRANTS.

Nicollet Island and Central avenue.
 Nicollet Island and Park street.
 Main street and Second avenue southeast.
 " " " Fourth avenue northeast.
 " " " Sixth avenue northeast.
 " " " Eighth avenue northeast.
 " " " Broadway northeast.
 Marshall street and Thirteenth avenue northeast.
 University avenue and Oak street southeast.
 University and second avenue southeast.
 " " " Fifth avenue southeast.
 " " " Tenth avenue southeast.
 " " " Sixteenth avenue southeast.
 " " " First avenue northeast.
 " " " Eighth avenue northeast.
 Fourth street and Seventh avenue southeast.
 " " " Tenth avenue southeast.
 " " " Twelfth avenue southeast.
 " " " Twentieth avenue southeast.
 " " " Central avenue.
 " " between Fourth and Fifth avenues northeast.
 Fifth street and Eighth avenue southeast.
 " " " Fourteenth avenue southeast.
 " " " Third avenue northeast.
 " " " Third avenue southeast.
 Sixth street and Tenth and Eleventh avenues southeast.
 Monroe and Eighteen-and-a-half avenue northeast.
 Sixth street and Sixth avenue southeast.
 Adams street and Broadway northeast.
 Seventh street and Central avenue.
 " " " Second avenue southeast.
 " " " Fifth avenue southeast.
 Monroe street and Broadway northeast.
 " " " Third avenue northeast.
 " " " Spring street northeast.
 Cambridge street and Harvard avenue.
 Adams street and Seventeenth avenue northeast.
 Jefferson street and Fourteenth avenue northeast.
 Harrison street and Twenty-fifth avenue northeast.
 Ramsey and Marshall streets northeast.
 Harrison street and Twenty-third avenue northeast.
 Ninth street and Fifth avenue southeast.
 Harrison street and Eighteen-and-a-half avenue northeast.
 Ninth street and Third avenue northeast.
 Ninth street and Tenth avenue southeast.
 Tenth street and Third avenue northeast.
 Como avenue and Fourteenth avenue southeast.
 Rollins street and Fourteenth avenue southeast.
 Hennepin avenue and Second street combination fire and sprinkling.
 Hennepin avenue and Sixth street " " "
 Nicollet avenue and Fifth street " " "
 Hydrants on East side 48
 Hydrants on West side 190

Total..... 238

Table No. 7.

*Showing the Number and Location of Watering Troughs and Fountains in City
January 1, 1890.*

FOUNTAINS.

On Bridge square.
Cedar avenue and Washington avenue.
Minnehaha and Twentieth avenue north.
Plymouth avenue and First street.
Central avenue and Fifth street. East Side.
Monroe street and Third avenue northeast.

TROUGHS.

On Plymouth avenue and Tenth street.
Plymouth avenue and Sixth street.
Washington avenue and Fifteenth avenue north.
Crystal lake road and James avenue.
Marshall avenue and Eighth avenue northeast.
Marshall avenue and Sixth avenue northeast.
University avenue and Fourteenth avenue southeast.
Main street and Thirteenth avenue northeast.
Lake street and Lyndale avenue.

Table No. 8.

*Showing Location of Hydrants Set in Place Flush. Condemned and Broken
Hydrants.*

Hennepin avenue and Ninth street, short hydrant taken out.
Hennepin avenue and Eighth street, broken.
First avenue south and Washington avenue, short hydrant taken out.
Fifth street and Fourth avenue north, short hydrant taken out.
First street and First avenue north, four inches taken out.
First street and Second avenue north, four inches taken out.
Eleventh avenue south and Third street, flush taken out.
Fifth street and Fourteenth avenue south, " " "
Fifth street and Sixteenth avenue south, " " "
Fifth street and Thirteenth avenue south, " " "
Eleventh street and Fourth avenue south, short hydrant taken out.
Grant street and Fourth avenue south, " "
Fourteenth street and Fourth avenue south, " "
Fifteenth street and Fourth avenue south, " "
Sixteenth street and Fourth avenue south, " "
Seventeenth street and Fourth avenue south, " "
Eighteenth street and Fourth avenue south, " "
Nineteenth street and Fourth avenue south, " "
Twentieth street and Fourth avenue south, " "
Twenty-second street and Fourth avenue south, " "
Twenty-fourth street and Fourth avenue south, " "
Second street and Tenth avenue southeast, flush hydrant "
Fourth street and Tenth avenue southeast, short hydrant "
Third street and Tenth avenue southeast, short hydrant "

Table No. 9.

Showing Hydrants Repaired During the Year 1889, with Location.

Jan.	3.	On Broadway and Harrison street.
		18½ avenue northeast and Harrison street.
	4.	Hennepin avenue and Fourth street,
	5.	Kenwood boulevard and Mt. Curve avenue.
	7.	First street and Second avenue south.
		Eighth avenue north and Bradford street.
	9.	Nicollet avenue and Tenth street.
	10.	Nicollet avenue and Twelfth street.
	12.	Western avenue and bridge.
	14.	Highland avenue and Hoag avenue.
	16.	Hennepin avenue and Ninth street.
	18.	Ninth avenue south and Seventeenth street.
	19.	Chicago avenue and Fourteenth street.
	22.	Aldrich avenue and Fifth street.
	24.	Aldrich avenue and Sixth street.
	26.	First street and Second avenue south.
	28.	Plymouth avenue and second street.
	29.	University avenue and Fourth avenue south.
	30.	Division street and Fifth avenue southeast.
		Main street and Third avenue southeast.
Feb.	6.	Nicollet avenue and Seventh street.
	7.	Sixth street and Fifteenth avenue southeast
	9.	Washington avenue and First avenue south.
	10.	Riverside avenue and Twenty-fourth street.
	15.	Sixth avenue south and Sixth street.
	16.	Cedar avenue and Ninth street.
	17.	Hennepin avenue and Ninth street.
	19.	Fourth street and Eighth avenue southeast.

Feb.	21.	Sixth avenue south and Eighth street.
	22.	Minnehaha avenue and Twenty-fourth street.
	25.	Eleventh avenue south and Twenty-fourth street.
	26.	Second street and first avenue south.
March	9.	Tenth avenue southeast and Fourth street.
	13.	Western avenue and Twelfth street.
	20.	First avenue south and Washington avenue.
	23.	Ninth avenue north and Washington avenue.
April	26.	Eighth avenue north and Fifth street.
	28.	Sixth avenue south and Fourteenth street.
	29.	Third avenue northeast and Madison street.
	2.	Hennepin avenue and Fourth street.
	3.	Hennepin avenue and Fifteenth street.
		Hennepin avenue and Second street.
	9.	Second avenue north and Fourth street.
		Second avenue south and Fourth street.
	10.	Sixth avenue south and Sixth street.
	11.	Fourth street and Sixth avenue southeast.
	16.	Fifth street and Fourth avenue north.
	18.	Sixth avenue southeast and Fourth street.
	20.	Eleventh avenue southeast and Fourth street.
	26.	Second street and Thirty-ninth avenue north.
	29.	Twenty-first avenue south and Fifth street.
	30.	Fourth street and Second avenue northeast.
May	3.	Harriet avenue and Twenty-eighth street.
	4.	Hawthorne avenue and Seventeenth street.
	6.	Sixth avenue north and Third street.
	7.	Linden avenue and Fifteenth street.
		Sixth avenue south and Sixth street.
	8.	Linden avenue and Fourteenth street.
	10.	Sixteenth avenue north and Sixth street.
	18.	Fourth avenue and Fifth street.
	20.	Third avenue south and Twentieth street.
	22.	Third avenue south and Third street.
		Eighth avenue south and Tenth street.
	24.	Central avenue and Fourth street
		Fourteenth avenue south and Ninth street.
	27.	Fifteenth avenue south and Ninth street.
	28.	Seventeenth avenue south and Twenty-sixth street.
		Seventeenth avenue south and Twenty-seventh street.
June	29.	Cedar avenue and Sixth street.
	6.	Twentieth street and Twenty-fifth avenue south, northeast corner.
	8.	Twentieth street and Twenty-fifth avenue south, southeast corner.
	11.	University avenue and First avenue northeast.
	15.	Sixth street and Eleventh avenue southeast.
	18.	Seventh street and Sixth avenue northeast.
	20.	Second street and Fifth avenue northeast.
	27.	Eleventh avenue south and Fifth avenue northeast.
July	28.	Third avenue south and Sixth street.
	6.	Third street and Fourth avenue northeast.
	9.	Third street and Fifth avenue northeast.
	13.	Linden avenue and Twenty-fourth street.
	16.	Thirteenth street and Sixth avenue north.
	23.	Humboldt avenue and Sixth avenue north.
	27.	Sixth avenue north and Irving avenue.
	29.	Sixth avenue north and James avenue.
	30.	Royalston and Oak Lake.
		Jefferson street and Fifteenth avenue northeast.
Aug.	1.	Emerson avenue and Fifteenth avenue north.
	5.	Franklin avenue and Thirteenth avenue south.
		Marshall avenue southeast, near Oak street.
	7.	Sixth avenue south and Fourth street.
	9.	Sixth street and Fourth avenue south.
		Fifth street and Fourth avenue south.
	12.	Fifteenth avenue south and Twelfth street.
	13.	Fifteenth avenue south and Tenth street.
	14.	Third street, between Hennepin avenue and first avenue north.
	17.	Eleventh street and Fourth avenue south.
	21.	Fourteenth street and Fourth avenue south.
	23.	Fifth avenue south and Sixth street.
Sept.	31.	Sixth avenue south and Ninth street.
	2.	Fourth avenue south and Eighth street.
	4.	Fourth avenue south and Eighteenth street.
	10.	Broadway and Elk street northeast.
	18.	Western avenue and Border street.
	28.	Eleventh avenue south and Fourth street.
Oct.	1.	Western avenue and Lake street.
		Western avenue and Lyndale avenue.
	2.	Western avenue and Emerson avenue.
	5.	Western avenue and Fremont avenue.
	7.	Sixteenth avenue southeast and Fourth street.
	9.	Western avenue and Girard avenue.
	12.	Western avenue and Irving avenue.
	19.	Oak street and Cambridge street.
	22.	Fourth street and Sixteenth avenue southeast.

Oct.	25.	Eighth street and Cedar avenue.
	29.	Seventeenth street and Vine place.
	30.	Hennepin avenue and Twenty-seventh street.
Nov.	31.	Fifth street and Ninth avenue north.
	4.	Second street and Twenty-second avenue north.
	5.	First avenue south and Twenty-fifth street.
	7.	Hennepin avenue and Twenty-seventh street.
	11.	Washington avenue and Sixth avenue south.
	12.	Kenwood boulevard and Twentieth street.
	13.	Twentieth avenue north and Fourth street.
	15.	Second avenue south and Eighth street.

Table No. 10.

Showing Number of Gates Repaired During the Year 1889, and Location.

March	2.	On Main street and Third avenue southeast.
	13.	Hennepin avenue and Sixth street.
	19.	First avenue north and Fourth street.
April	3.	Nicollet avenue and Third street.
	16.	Hennepin avenue and First street.
	22.	East Nicollet avenue, gate on Fourth street.
	22.	Fourth street, gate on Nicollet avenue.
May	6.	Twentieth street and Twenty-fourth avenue.
June	25.	First avenue and Twenty-fourth street.
July	26.	Sixth avenue north and Lyndale.
	26.	Sibley street and Eighth avenue northeast.
Aug.	28.	Harmon and Twelfth street.
	31.	Sixth avenue south and Ninth street.
Sept.	2.	Fourth avenue south and Eighth street.
	4.	Fourth avenue south and Fifteenth street.
	24.	Fourth avenue south and Sixteenth street.
	26.	Fourth avenue southeast and Fourth street.
Oct.	3.	Plymouth avenue and Fourth street.
	7.	Sixteenth avenue southeast and Fourth street.
	19.	Ninth street and Fifth avenue south.
	21.	Sixth street and Nicollet avenue.
	29.	Twentieth avenue south and Eighth street.
Nov.	5.	Hennepin avenue and Twenty-seventh street.
	7.	Royalston avenue and Highland.
		Valley avenue and Royalston avenue.
	11.	Seventh avenue south and Tenth street.
	12.	First street and Second avenue south.
	12.	Second avenue south and Washington avenue.

Table No. 11.

Showing Mains Repaired During 1889, and Location.

On Harrison street and Twenty-third avenue northeast,
 Division street and Fifth avenue southeast.
 Sixth street and Fifteenth avenue southeast.
 Eighteen-and-one-half avenue northeast and Jackson street.
 Second street and Forty-first avenue north.
 Second street and Thirty-ninth avenue north.
 Cambridge street southeast.
 First avenue south and Twelfth street
 Monroe street and Broadway.
 Fourth street and Sixth avenue southeast.
 Western avenue and Dupont.
 Oak street and Marshall street northeast.
 Third avenue north and Second street.
 Fifth street and Tenth avenue southeast.
 Fourth street and Eighth avenue north.
 Morgan avenue and Fifth avenue north.
 Central avenue and Seventh street.
 University avenue and First avenue northeast.
 Sixth avenue north and Dupont.
 Jefferson street and Fifth avenue northeast.
 Emerson avenue and Fifth avenue north.
 Sixth avenue south and First street.
 Fifth street and Fourth avenue north.
 Harmon place and Twelfth street.
 Lyndale avenue and Vineland place.

Table No. 12.

Showing Inventory of Plumbing Shop.

Three pipe dyes stocks.	One gallon can.
One set pipe dye $\frac{1}{4}$ to 4 in.	One desk.
Three pipe cutters.	One tool chest.
Three pair adj pipe tongs.	One force pump, brass.
Two pair chain tongs.	Six feet $\frac{3}{4}$ steam hose.
One pipe vice.	Three mill saw files.
One bench vice.	One set pipe taps, $\frac{1}{2}$ to 2 inch.

Two monkey wrenches.
One 14-inch pipe wrench.
Three chisels.
One plumber's furnace.
One turn on wrench.
One bench, wooden.
One squirt can.

12-4 inch.
12- $\frac{3}{4}$ "
12-3 "
12- $2\frac{1}{2}$ "

6-4 inch.
6- $3\frac{1}{2}$ "
5-3 "

6-4 inch.
6- $3\frac{1}{2}$ "
6-3 "
7- $2\frac{1}{2}$ "
13-2 "
9- $1\frac{1}{2}$ "

7-2 inch.
2- $1\frac{1}{2}$ "
5- $1\frac{1}{4}$ "
2-1 "

12-4 inch.
12- $3\frac{1}{2}$ "
11-3 "
8- $2\frac{1}{2}$ "
7- $\frac{3}{8}$ "
10- $\frac{1}{2}$ "
8- $\frac{3}{4}$ "
11-1 "
12- $1\frac{1}{2}$ "

6- $\frac{1}{4}$ inch.
1-4 "
4-2 "
5- $1\frac{1}{2}$ "
6- $1\frac{1}{4}$ "

3- $\frac{1}{4}$ x $\frac{1}{2}$ inch.
3- $1\frac{1}{4}$ "
3- $\frac{3}{4}$ "
2-2 "
2-2 x $1\frac{1}{4}$ "
8-2 x1 "
2-2 x $1\frac{1}{4}$ "
3- $1\frac{1}{2}$ x $\frac{1}{4}$ "
3- $\frac{3}{4}$ x $\frac{1}{2}$ "
3-1 x $1\frac{1}{4}$ "
2- $1\frac{1}{4}$ x $\frac{3}{4}$ "
3- $1\frac{1}{4}$ x $\frac{3}{4}$ "
3- $\frac{3}{4}$ x1 "
2-1 x $\frac{3}{8}$ "

3- $2\frac{1}{2}$ x $1\frac{1}{2}$ inch.
1-2 x1 "
1- $1\frac{1}{2}$ x $1\frac{1}{4}$ "
1- $1\frac{1}{2}$ x1 "

4- $\frac{3}{4}$ inch solder.
22-3 " short.
21-2 " "
12- $3\frac{1}{2}$ " "
19- $2\frac{1}{2}$ " "
11- $1\frac{1}{2}$ " "
18- $1\frac{1}{4}$ " "
12- $\frac{1}{2}$ " "
6- $\frac{3}{8}$ " "

11-1 inch.
2- $1\frac{1}{2}$ "
3- $\frac{1}{4}$ "

60 ft. $\frac{3}{4}$ iron.

12-2 inch globe.
3- $\frac{3}{4}$ T. handle C. & W.

9- $\frac{3}{4}$ Ball Com.

One account book.
Thirteen pounds solder.
Two chairs.
One 1 in. left-hand dye.
One $1\frac{1}{2}$ in. left-hand dye.
One 3 in. wrench.

TEES.
8- $1\frac{1}{4}$ inch.
7- $\frac{3}{8}$ "
1- $2\frac{1}{2}$ x4 "
12-1 x $1\frac{1}{4}$ "

FLANGES.
7- $2\frac{1}{2}$ inch.
6-2 "

PLUGS.
6- $1\frac{1}{4}$ inch.
11-1 "
12- $\frac{3}{4}$ "
12- $\frac{1}{2}$ "
6- $\frac{1}{4}$ "

UNIONS.
6- $\frac{3}{4}$ inch.
2- $\frac{1}{2}$ "
6- $\frac{1}{4}$ "
3- $\frac{1}{4}$ x $\frac{1}{2}$ "

ELBOWS.
10-2 inch.
12-1 " 45 degrees.
4- $1\frac{1}{4}$ "
4- $1\frac{1}{2}$ "
13-2 "
12- $2\frac{1}{2}$ "
11-3 "
11- $3\frac{1}{2}$ "
1-4 "

CAPS.
2-1 inch.
6- $\frac{3}{4}$ "
3- $\frac{1}{2}$ "
11- $\frac{1}{4}$ "
10- $\frac{1}{8}$ " brass.

BUSHINGS.
1-1 x $\frac{1}{2}$ inches.
6-1 x $\frac{1}{4}$ "
5- $2\frac{1}{2}$ x2 "
3- $2\frac{1}{2}$ x $1\frac{1}{2}$ "
2- $2\frac{1}{2}$ x $1\frac{1}{2}$ "
3- $2\frac{1}{2}$ x3 "
3-2 x3 "
3- $1\frac{1}{2}$ x3 "
3- $3\frac{1}{2}$ x2 "
3- $3\frac{1}{2}$ x $2\frac{1}{2}$ "
3-3 x $3\frac{1}{2}$ "
2- $2\frac{1}{2}$ x4 "
2- $3\frac{1}{2}$ x4 "

REDUCERS.
6- $1\frac{1}{2}$ x $\frac{3}{4}$ inch.
2- $1\frac{1}{4}$ x1 "
2- $1\frac{1}{4}$ x $\frac{3}{4}$ "

NIPPLES.
13-3 inch long.
24-2 " "
12- $3\frac{1}{2}$ " "
11-4 " "
24- $2\frac{1}{2}$ " "
23- $1\frac{1}{2}$ " "
22- $1\frac{1}{4}$ " "
12- $\frac{3}{4}$ " "
6- $2\frac{1}{2}$ " "

COUPLINGS.
1- $\frac{1}{4}$ inch R. & L.
2-1 " "

PIPES.
16 ft. $\frac{3}{4}$ iron.

VALVES.
6-1 L. H. C. & W.

COCKS.

Table No. 13.

Showing Inventory of Blacksmith's Shop.

1 vice.	1 drill press.
1 bench.	1 flatter.
10 pair tongs.	1 fuller.
1 2-lb. sledge.	3 frames for Gate wrenches.
1 4-lb. hammer.	1 anvil.
10 top swedges.	2 set hammers.
2 bottom swedges.	6 heading tools.
1 sledge block.	4 files.
6 round punches.	1 monkey wrench.
2 hot chisels.	1 squirt can.
1 coal chisel.	1 2-gal. oil can.
2 gauges.	1 account book.
1 forge complete.	
2 bars $\frac{3}{8}$ x $\frac{5}{8}$ common iron.	4 bars 5-16 round Norway iron.
3 " $\frac{7}{8}$ x $\frac{5}{8}$ " " "	3 " $\frac{1}{4}$ " " " "
2 " $1\frac{1}{4}$ x $\frac{3}{4}$ " " "	1 " 1 " " " "
1 " $1\frac{1}{2}$ x1 " " "	1 " $\frac{7}{8}$ " " " "
1 " $1\frac{1}{2}$ x $\frac{5}{8}$ " " "	6 " 2x $\frac{3}{8}$ flat iron.
2 " $\frac{3}{4}$ x $\frac{3}{4}$ " " "	4 " $1\frac{1}{4}$ x5-16 " "
7 " $3\frac{1}{2}$ x $1\frac{1}{4}$ " " "	5 " $1\frac{1}{4}$ x $1\frac{1}{4}$ " "
4 " $1\frac{1}{4}$ x3-16 " " "	1 " 4x $\frac{3}{8}$ " "
1 " $\frac{3}{4}$ round " " "	1 " 2 $\frac{1}{4}$ x $\frac{3}{8}$ " "
1 " $\frac{5}{8}$ " " " "	1 " $\frac{1}{2}$ x $1\frac{1}{2}$ " "
4 " 1 " " " "	3 feet $1\frac{3}{4}$ x $1\frac{1}{2}$ steel.
12 " $\frac{1}{2}$ " Norway " "	1 bar 5-16 " "
8 " $\frac{3}{8}$ " " " "	

Table No. 14.

Showing Inventory of the Office taken January 1, 1889.

BUSINESS OFFICE.

1 MacNeal and Urban safe.	3 waste baskets.
2 stools.	1 letter press.
3 cuspidors.	1 type writer.
2 stationery desks.	1 directory.
2 chairs.	Stationery.
3 paper weights.	1 pair scissors.

SUPERVISOR'S OFFICE.

1 carpet.	1 map.
1 desk.	4 cuspidors.
8 chairs.	2 waste baskets.
1 standing desk.	1 drop lamp (electric).
2 stools.	1 fire alarm gong.
2 writing tables.	1 water gauge.
1 hat tree.	1 letter press.
1 directory.	Stationery.
1 pair scissors.	

ENGINEER'S OFFICE.

1 engineer's transit.	1 engineer's level.
1 New York leveling rod.	2 drawing tables.
2 chairs.	1 office desk.
2 cuspidors.	1 waste basket.
1 steel tape, 50 feet.	1 radius bar for beam compasses.
1 steel straight edge, 36 inches.	1 nest of color-cups, $3\frac{3}{4}$ inch.
1 ink slab and cover.	2 tumblers.
1 pair callipers, large.	1 cup, granite ware.
1 dust brush.	1 slate.
1 sponge.	5 wall maps.
1 atlas of Minneapolis.	5 framed drawings.
2 stools.	1 model of pump valve.
3 tin tube floats.	Stationery.
	1 $\frac{1}{2}$ dozen thumbtacks.

OFFICE AT TOOL HOUSE.

2 stationary desks.	1 waste basket.
1 writing desk.	1 map of Minneapolis.
1 writing table.	1 atlas.
3 oak office chairs.	1 directory.
1 base burner coal stove.	1 water phone.
2 cuspidores.	1 water gauge.
1 cooler.	

STABLE AT TOOL HOUSE.

5 horses.	4 horse blankets.
5 single harness.	1 hydrant thawer on runners.
5 single wagons.	8 tons hay.
3 sleds.	50 bushels of oats.

TOOLS AT TOOL HOUSE.

3 tapping machines, complete.	2 2-ft. iron squares.
14 straight wrenches.	1 Harrington chain block.
3 S wrenches.	1 Edison hand pump.
6 small socket wrenches.	1 patent caulking hammer.
5 monkey wrenches.	18 shovels.
4 gate wrenches.	15 picks and handles.
4 pair extension tongs.	1 pair nippers.
2 sets caulking tools.	1 belt punch.
2 8-lb. striking hammers.	2 tape lines.
2 8-lb. steel sledges.	1 pike pole.
5 crowbars.	1 plumber's furnace and nipping outfit.
4 hand saws	1 grindstone.
2 Crosscut saws.	1 iron pipe vice.
1 jack plane.	2 2-inch dies and stock.
*2 braces and bits.	1 1-inch die and stock.
1 1-inch auger.	1 2-inch pipe cutter.
1 spirit level.	1 1-inch pipe cutter.
2 iron bench vices.	2 pair 2-inch tongs.
1 carpenter's bench and vice.	

MATERIAL AT TOOL HOUSE.

63 sprinkling stand pipes.	9 lanterns.
23 globe valves for sprinkling stand pipes.	1 five-gallon oil can.
6 dozen 2-inch elbows.	1 two-gallon oil can.
222 feet 2-inch iron pipe.	$\frac{1}{2}$ dozen flat files.
118 one-half inch corporation cocks.	25 feet old chain.
120 five-eighths inch corporation cocks.	1 iron tea kettle.
75 three-fourths inch corporation cocks.	$\frac{1}{2}$ bale caulking rope.
75 one-inch stop cocks.	10 lbs. solder.
40 three-fourths inch stop cocks.	75 lbs. of lead pipe.
36 brass hydrant tops.	1 ton nut coal.
1 dozen old hydrant valves.	1 barrel coal oil.
40 lbs. old nuts and bolts.	1 wood stove.
1 keg 20 d nails.	30 joints stove pipe.
1 keg 10 d nails.	1 platform Fairbank scale.
4 galvanized baling buckets	5 cords iron wood for mauls.

Table No. 15.

Showing Material and Supplies on hand January 1, 1890.

GATES.		
13— 6-inch.	2—10-inch.	6—16-inch.
14— 8 “	21—12 “	4—24 “
SLEEVES.		
2—36-inch.	14— 8-inch.	9—24-inch.
2—24 “ open.	2—10 “	2—18 “
13— 4 “	20—12 “	1—36 “
24— 6 “	16—16 “	
CROSSES.		
6—12x12-inch.	1—16x12-inch.	2—12x 8-inch, oblique.
5— 8x 8 “	1—24x 8 “	4—16x16 “
2— 8x 4 “	8— 6x 4 “	1— 8x10 “
25— 6x 6 “	1—16x 6 “	7— 8x12 “
5—16x 8 “	1—16x10 “	
11— 8x 6 “	1—10x 4 “	
TEES.		
15— 6x 6-inch.	10— 6x 4-inch.	1—16x 3-inch.
6— 8x 6 “	1—24x24 “	2—12x 3 “
5—12x 6 “	2—24x 3 “	2— 8x 3 “
5— 8x 8 “	2—12x12 “	3— 6x 3 “
20—12x 4 “	1—10x 6 “	5— 6x 6-inch Y.
4—10x 4 “	1—16x 8 “	3—12x12 “ “
2—16x 4 “	1—16x12 “	
12— 8x 4 “	2—16x16 “	
PLUGS.		
20— 4-inch.	19—10-inch.	7—24-inch.
12— 6 “	34—12 “	1—18 “
20— 8 “	25—16 “	
REDUCERS.		
6— 8 to 6-inch.	7— 6 to 4-inch.	1—16 to 8-inch.
5—10 to 6 “	1—16 to 14 “	2—24 to 12 “
6—12 to 6 “	1—24 to 10 “	1—24 to 16 “
CONES.		
69 New.		HYDRANTS.
5 Old.		64 New.
		27 Old.
BENDS.		
11— 4-inch $\frac{1}{4}$ bends.	4—12-inch $\frac{1}{4}$ bends.	6—12-inch $\frac{1}{8}$ bends.
14— 6 “ $\frac{1}{4}$ “	16— 8 “ $\frac{1}{8}$ “	1—24 “ $\frac{3}{8}$ “
2—10 “ $\frac{1}{4}$ “	20—10 “ $\frac{1}{8}$ “	—36 “ $\frac{1}{8}$ “

COVERS.

63 Cast iron gate covers.

23 Cast iron hydrant covers.

HYDRANT BRANCHES.

4 Extension hydrant tops.

TOOLS FOR LAYING PIPE.

60 Shovels in good order.
 50 Shovels in bad order.
 232 Picks.
 90 Pick handles.
 13-14-pound sledges.
 3-10 " "
 3-13 " "
 1-11 " "
 100 feet rubber belting.
 6 bales caulking rope.
 10 tons lead.
 10 pairs rubber boots, long.
 15 lanterns.
 10 red globes.
 4 white globes.
 3 hand axes.
 4 hand saws.
 4 gasoline torches.
 2 crosscut saws.
 9 set caulking tools.
 12 road scrapers.
 2 spoon scrapers.
 25 tool boxes.
 9 coal boxes.
 9 furnaces complete.
 10 sets double blocks and falls.
 7 wheel derrick.
 3 crank "
 6 tripod "
 5 striking hammers.
 15 crowbars.
 6 pieces 6-inch pipe.
 31 " 10 " "
 7 " 12 " "
 3 " 16 " "
 17 " 24 " "
 1 " 36 " "

10 Old blocks.
 1 Clogging axe.
 10 Sheetting caps.
 15 Steel wedges.
 2 Sheetting pullers.
 16 Iron mauls.
 20 Wood mauls.
 5 5-Gallon oil cans.
 3 Quart cans.
 3 Grapples.
 219 Brass screen.
 1000 lbs. scrap iron.
 3 1-gallon oil cans.
 2 squirt cans.
 6 water pails.
 5 dippers.
 27 chum drills.
 8 jumper drills.
 3 plows.
 300 feet 1-inch rope, old.
 2 wheelbarrows, bad.
 154 pounds $\frac{3}{4}$ chains.
 15 maul rings.
 3 monkey wrenches.
 1 electric battery.
 4 clothes lines.
 1 tape line.
 2 brands.
 6 Edison pumps.
 11 diaphragms.
 15 pieces 8-inch pipe 4 feet and over.
 10 " 10 " " 4 " " "
 4 " 12 " " 4 " " "
 6 " 16 " " 4 " " "
 5 " 24 " " 4 " " "
 5 " 36 " " 4 " " "

LUMBER.

25,000 feet.

Table No. 16.

*Showing in Detail Inventory and Supplies at Pumping Station No. 1,
 January 1st, 1890.*

OFFICE.

2 desks.
 1 book case.
 1 water cooler.
 1 Tabor indicator.
 9 record books.
 1 slate.
 1 stool.

2 chairs.
 1 cuspidore.
 2 ink wells.
 1 drafting scale.
 1 duster.
 2 gas lamps and hose.
 Stationery.

TOOLS AND SUPPLIES.

1 pair shears.
 1 work bench.
 1 lead pot.
 1 quart cup.
 3 5-gallon cans.
 5 10-gallon cans.
 5 copper oil cans.
 2 4-gallon oil tanks.
 1 hand saw.
 5 bark rakes.
 2 stoves and pipes.
 1 grind stone.
 2 pairs pipe tongs.
 5 cold chisels.
 1 stove poker.
 1 pipe wrench.
 4 valve wrenches.
 12 assorted wrenches.
 1 dredging fork.
 1 $2\frac{3}{8}$ nozzle.
 2 branding irons.

30 gallons engine oil.
 5 valves for condenser.
 2 sledges.
 2 jack screws.
 1 iron wedge.
 1 blasting battery.
 1 registering gauge and clock.
 1 iron vise.
 1 surface plate.
 2 gasoline torches.
 1 alligator wrench.
 11 gate wrenches.
 4 screw wrenches.
 4 revolution counters.
 50 feet $\frac{1}{2}$ inch M rope.
 1 copper hammer.
 11 wire screen iron frames.
 1 grabe for hoisting screens.
 1 extra crank for same.
 216 feet 5-16 chain.

1 axe.	1 3-16-inch rod.
3 assorted files.	2 packing hook.
3 caulking irons.	1 cant hooks.
1 pair tongs.	1 1½ inch nozzle.
3 rackets.	2 chains.
7 drills.	11 socket wrenches.
7 pressure guages.	3 glass tubes.
1 pan for tallow.	6 oil cups.
3 pair rubber boots.	16 pounds star candles.
1 pair breast boots.	10 pounds rubber packing.
1 set 12-inch blocks.	25 pounds hemp packing.
1 set 10 " "	40 new rubber valves.
1 set 8 " "	8 pounds tallow.
100 feet 1½ inch rope.	12 pounds square flax packing.
50 feet wire rope.	3 stone drills (steel).
25 feet ¾-inch chain.	1 screw driver.
2 16 feet ladders.	3 steel bars.
1 copper bar.	1 steam whistle.
250 gallon oil cans.	80 pounds cotton waste.
1 coal scuttle.	18 tons Illinois coal.
75 feet ¾-inch hose.	1 box brass polish.
1 paint brush.	6 large globes.
12 gallon can.	1 box ¾-inch round packing.
8 kegs drifts.	12 feet ¾-inch round packing.
2 pick poles.	20 pounds 10d nails.
3 shovels.	10 pounds 20d nails.
6 picks.	1 spool piston packing.
2 scoop shovels.	50 pounds babbitt.
2 ice chisels.	3 pounds sheet copper.
4 ice rakes.	1000 pounds scrap iron.
7 brass valves.	40 gallons gasoline.
17 old oil cups.	1 gallon lard oil.
25 pounds patent grease.	100 feet ¼-inch wire rope.

PUMPS, WATER WHEELS, ETC.

- 2 horizontal single acting plunger pumps.
- 3 horizontal double acting piston pumps (2 each),
- 1 upright double acting piston pump (2 each).
- 3 60 upright American Turbine water wheels.
- 2 54 upright New American Turbine water wheels.

STEAM PLANT.

- | | |
|--|-----------------------------|
| 2 engines rated at 300 horse power each. | 2 thermometers. |
| 1 Knowles air pump and condenser. | 1 duplex Knowles feed pump. |
| 6 steel boilers 16x3 feet. | 1 Kortings indicator. |
| 1 set engineer's oilers. | 2 clinker bars. |
| 1 oil cup filler. | 1 scraper. |
| 1 oil pump. | 2 coal scoops. |
| 5 assorted wrenches. | 1 wheel barrow. |
| 7 pressure guages. | 1 flue cleaner. |
| 1 vacuum guage. | 1 2-inch water meter. |

Table No. 17.

Showing in Detail Inventory of Tools and Material on Hand at Pumping Station No. 2.

1 fire alarm gong.	½ barrel W. W. oil.
1 75-gallon oil tank.	1 12-inch monkey wrench.
2 50-gallon oil tanks.	2 E. R. wheel barrows.
1 pressure gauge.	1 stone wheel barrow.
1 revolving counter.	1 hoe.
1 flue cleaner.	1 wood mallet.
2 tons youghoney lump coal.	4 rack rakes.
1 desk.	1 ice scoop.
2 chairs.	2 pick poles.
3 record books.	8 ice picks.
1 duster.	2 ice shovels.
2 cuspidores (wood.)	14 ice chisels.
800 register gauge blanks.	2 ice hoes (old.)
1 lawn mower.	2 ice hooks.
1 extension ladder.	2 ice tongs.
1 crosscut saw (old.)	2 rubber scrubbers.
1 buck saw (old.)	2 rubber coats.
2 ice saws.	3 pair rubber boots (new.)
1 hand saw.	5 kegs 12d nails.
1 sledge (old.)	4 whitewash brushes (old.)
2 axes.	26 bars soap.
1 hatchet.	25 pounds soda ash.
1 copper hammer.	7 lights of glass, 10x16.
1 20-inch monkey wrench.	24 window sash (old.)
1 hand wheel for gate.	50 feet 1-inch rope (old.)
8 open wrenches.	4 3-gallon cans.
1 box wrench.	2 2-gallon cans.

1 socket wrench.	11-gallon can.
2 alligator wrenches.	2 paint brushes (old.)
4 flat files (new.)	2 kerosene lanterns.
63-corned files.	1 1-gallon measure.
1 long steel bar.	1 copper oiler.
1 short steel bar.	2 brass oilers.
1 steel drill.	2 brooms.
1 valve wrench.	15-16 graber chains.
1 1½-inch wrench.	4 long handled shovels.
22-inch augers.	2 new jack screws.
3 packing hooks.	1 1-gallon iron pail.
1 bench vice.	1 drinking cup.
1 patent screw driver.	2 sets 4-inch blocks.
1 carpenters' square.	50 pounds soap stock.
2 scoop shovels.	1 extra water wheel step.
5 fire poker.	1 extra water wheel gate.
25 pounds No. 1 waste.	1000 common brick.
¾ square yards sheet.	150 feet 1½-inch rubber hose for water.
5 pounds sulphur.	35 feet 1¼-inch rubber hose for steam.
50 gallons West Virginia oil.	25 feet 1½-inch rubber hose for steam.
1 75-inch American turbine water wheel.	15 feet 1-inch rubber hose for steam.
1 single acting 5 plunger pump.	10 pounds Clinton brand packing.
2 tubular boilers, 14 feet by 42 inches.	70 pounds hemp packing.
1 ring and segment for gate.	1 gear and pinion for gate.
1 pair extension pipe tongs.	1 hoisting rigging for screens.
6 extra brass valve seats.	1 adz.
34 extra rubber valves.	30 1¼x36-inch drift bolts.
2 pieces 10x12x24 lumber.	25 ¾x15-inch drift bolts.
1 " 10x12x22 "	4 pieces 8x8x16 lumber.
6 " 10x12x16 "	6 " 3x12x16 "
1 " 10x12x10 "	3 " 3x12x16 "
1 " 8x8x16 "	12 " 2x12x16 "

Table No. 18.

Showing Inventory of Shingle Creek Pumping Station.

ENGINE ROOM.

2 15,000,000 gal. Worthington high duty pumps.	6 100 candle power lamps.
2 boiler feed pumps.	3 indicators.
2 air compressors.	1 brush broom.
1 25-horse power Wright engine.	1 dust pan.
2 sets oilers.	6 cuspidores.
1 Edison dynamo.	100 ft. 1½ fire hose with reel and nozzle.
1 switch board.	1 fire alarm gong.
200 16 candle power lamps	1 registering gauge.
20 50 " " "	

OFFICE.

1 desk.	1 waste basket.
6 chairs.	1 rubber ruler.
1 inkstand.	3 penholders.
1 box pens.	1 bottle ink.

BOILER ROOM.

6 9 ft. 6x15 ft. 6 boilers.	2 coal picks.
6 scoop shovels.	3 coal cars.
3 sluice bars.	1 Fairbanks scale.
6 ash rakes.	1 slate and pencil.
50 ft. new steam hose.	1 reflecting lamp.
50 ft. old steam hose.	100 ft. 1½ hose with reel and nozzle.
2 wheelbarrow.	2 climber hooks.
6 flue cleaners.	1 steam flue cleaner.

GATE HOUSE.

21 wire screens.	1 pike pole.
2 hand-wheels for hoisting gates.	100 feet rope.
1 set iron blocks.	1 ice rake.
2 ice chisels.	

SUPPLIES IN OIL ROOM.

2 50-gallon oil tanks.	1 box candles.
1 barrel gasoline oil.	6 lights glass.
3 barrels cylinder oil.	50 lbs. asbestos packing.
12 lanterns.	25 lbs. hemp packing.
8 brooms.	10 lbs. plumbago.
4 boxes cleaning compound.	10 rubber gaskets.
30 gallons machine oil.	1 box soap.
2 soap cups.	2 sponges.
4 scrubbing brushes.	2 mop sticks.
4 mop handles.	1 10-gallon can.
2 1-gallon oil cans.	1 diving apparatus, complete.
2 pressure gauges.	1 work bench.

Table No. 19.

Showing how City Water may be Wasted. Gallons and Hundredths of Gallons of Water that will be Discharged per Minute Through Various Sized Orifices at the Heads Stated.

HEAD.	Pressure in. per square in.	DIAMETERS OF ORIFICES IN INCHES AND FRACTIONS OF AN INCH.													
		1-64	1-32	1-16	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
20 feet.....	8.66	0.02	0.07	0.30	1.20	5.10	11.70	20.60	32.20	46.20	82.30	128.40	184.80	252.00	328.80
40 feet.....	17.32	0.02	0.11	0.45	1.80	7.40	16.30	29.60	45.50	65.50	116.50	182.40	261.60	356.40	465.60
60 feet.....	25.99	0.03	0.14	0.55	2.20	8.90	20.00	35.60	57.70	80.30	142.80	223.20	320.40	436.80	571.20
80 feet.....	34.65	0.04	0.16	0.65	2.60	10.30	23.20	41.20	64.30	92.60	164.40	258.00	370.80	505.20	658.80
100 feet.....	43.31	0.04	0.18	0.75	2.90	11.50	25.90	46.10	72.00	103.70	183.60	288.00	415.20	565.20	738.00
120 feet.....	51.98	0.05	0.19	0.78	3.10	12.60	28.30	50.40	78.70	113.50	201.60	315.60	453.60	624.40	807.60
140 feet.....	60.64	0.05	0.21	0.85	3.40	13.60	30.60	54.50	85.20	122.40	217.20	310.80	490.80	668.40	872.40
150 feet.....	64.97	0.05	0.22	0.88	3.50	14.10	31.70	56.40	88.20	127.20	225.60	332.80	507.60	681.20	902.40
175 feet.....	75.80	0.06	0.24	0.95	3.80	15.20	34.20	61.00	95.30	136.80	243.60	380.40	548.40	748.80	975.60
200 feet.....	86.83	0.06	0.26	1.02	4.10	16.30	36.60	65.20	101.80	146.40	260.40	416.80	588.00	798.00	1,042.80
225 feet.....	101.08	0.07	0.28	1.12	4.50	17.90	41.30	71.50	137.70	185.80	285.20	445.90	642.20	871.30	1,140.80

ANNUAL REPORT

OF THE

CHIEF ENGINEER OF THE FIRE DEPARTMENT

OF THE

City of Minneapolis

TOGETHER WITH THE REPORT OF

SUPERINTENDENT FIRE AND POLICE TELEGRAPH

— AND —

VETERINARY SURGEON,

For the Fiscal Year Ending December 31, 1889.

MINNEAPOLIS :
HARRISON & SMITH, PRINTERS.
1890.

FIRE DEPARTMENT.

FRANK L. STETSON,	-	-	Chief Engineer.
AUGUST H. RUNGE,	-	-	First Ass't Engineer.
PETER J. KENNEY,	•	-	Second Ass't "
Z. T. MORRISON,	-	-	Sup't Fire Alarm Telegraph.
ED. W. LAMBERT,	-	-	Ass't Sup't Fire Alarm Telegraph.
HOSEA S. TUTTLE,	-	-	Master Mechanic.
JOHN W. HORTON,	-	-	Veterinary Surgeon.
F. M. SNYDER,	-	-	Department Secretary.
W. A. CARLETON,	-	-	Assistant "

FIRE DEPARTMENT COMMITTEE OF CITY COUNCIL.

CHRISTIAN ELLINGSEN, Chairman.	
WM. B. WOODWARD.	JAY W. PHILLIPS.
ERICK RHODE.	FRED C. BARROWS.

ANNUAL REPORT

OF THE

CHIEF ENGINEER OF FIRE DEPARTMENT.

OFFICE OF CHIEF ENGINEER FIRE DEPARTMENT, }
MINNEAPOLIS, MINN., January 1st, 1890. }

To the Honorable City Council of the City of Minneapolis:

GENTLEMEN—In compliance with law, I have the honor herewith to submit to you the annual report of the fire department, the same being my eighth annual report, and the eleventh of the paid fire department of the City of Minneapolis. A complete record of the operations of the department and expenditures commencing January 1st, 1889, and ending December 31st, 1889, is embodied in this report.

The fire waste for the year ending December 31st, 1889, has been comparatively light, considering the property involved and number of alarms given. The total loss on buildings and contents amounts to about \$275,000.00. There has been 484 alarms during the year. This gives an average loss of about \$560 for each fire. There has been two fires during the year where the loss exceeded the sum of \$10,000.

396 fires occurred where the loss was under				\$100
29	"	"	from \$100	to 200
11	"	"	200	300
9	"	"	300	400
8	"	"	400	500
3	"	"	500	600
4	"	"	600	700
2	"	"	700	800
1	"	"	900	1,000
9	"	"	1,000	2,000
5	"	"	2,000	3,000
2	"	"	4,000	5,000
2	"	"	5,000	6,000
1	"	"	8,000	9,000
2	"	"	over 10,000	

MANUAL FORCE.

There has been an increase of nineteen in the manual force in the last year. The force now consists of 204 officers and men.

APPARATUS.

The apparatus of the department has been increased during the year by the addition of one hose carriage and three fuel wagons. The apparatus of the department is classified as follows: Six engines, first-class; seven engines, second-class; one engine, second-class (old in reserve); fifteen hose carriages, six chemical engines, five hook and ladder trucks and one in reserve, one supply wagon, three fuel wagons, one fire alarm telegraph wagon, four chiefs' buggies, four chiefs' sleighs, sixteen exercising wagons and seventeen set of bobsleds. All of the apparatus is in good order, with few exceptions. It will be necessary to make some repairs and paint some of the oldest apparatus during the year.

REPAIR SHOP.

The need of a repair shop and the reasons why it is desirable to establish one, have been given fully in former reports, and need not be repeated here.

The shop was completed in March, 1889, is a two-story brick building, 55x65. The first floor is occupied by machine shop, blacksmith shop, paint shop and engineroom. The second floor is occupied by woodworking shop, harness shop, pattern shop, hose depot and store room. There has been employed during the past ten months an average of sixteen men daily, detailed from the permanent force. During this time they have made all needed repairs to apparatus, hose and harness of the department, and in addition thereto made a large quantity of new work. It has thus far come up to the expectations of the board of engineers. The amount estimated for equipping and fitting up the shop was \$5,000, but of this sum only \$3,734.21 has been expended up to date. It is probable that the further sum of \$1,000 will equip it sufficiently to do such work as it is proposed at present to undertake.

The following list of the principal machines and tools will serve to indicate the character of the equipment, and the capacity of the shop: One twelve horse-power steam engine, cylinder 7x10 inches; one twenty-five horse-power, horizontal, tubular boiler; one 26x26 iron planer, 5 foot table; one twenty-four inch swing engine lathe, 12 foot bed, turns 8 feet; one sixteen inch swing engine lathe, 6 foot bed, turns 3½ feet; one twenty inch Bickford upright drill; one upright hand drill; one No. 0 Sturtevant pressure blower; two blacksmith forges; one furnace for heating tires; one thirty-six inch band saw; one wood lathe; together with the numerous smaller tools and appliances which are found in every well equipped machine shop.

The following is some of the work done, with cost of material, labor not added:

Engine No. 1 has been repaired, tires re-set, piston-rods and valve-stems turned up true. No. 1 Hose Cart has had a new pole and tires re-set.

Engine No. 3 was overhauled and relief valve attached.

Engine No. 4 was overhauled and relief valve attached.

Engine No. 5 was overhauled and new brake attached.

Engine No. 6 had a general overhauling, pumps re-bored, new suction attached and re-painted as good as new.

Engine No. 7, boiler condemned and is now in the shop.

Engine No. 8, tires re-set, relief valve attached, etc.

Engine No. 9, some slight repairs and tires re-set.

Engine No. 10, has had a new set of valves, new air-chamber and other repairs.

Engine No. 11, new relief valve and circulating pump overhauled.

Old Engine No. 11, thoroughly overhauled and re-painted.

Engine No. 14, new set valves.

All of the hose carriages have been repaired, new brakes attached and tires re-set. All the exercising wagons have been re-built and re-painted. All the hook and ladder trucks have been overhauled and many new ladders made. The chemical engines have had more or less repairs. The fire alarm telegraph wagon has been re-built. The chief's and assistants' buggies have all been overhauled, repainted and new wheels furnished.

The old No. 3 Truck has been re-built practically new. New axles and wheels, new frame, ladders mostly all new. All brass and nickel-plated trimmings new. It has been re-painted and is as good as new. Cost of material, paint included, \$202.80. Hours worked on same, 3,099.

The old Hose Carriage No. 3 has been re-built, new wheels and axles, new springs and re-painted, at a cost of \$138.91 for material; labor, 927 hours.

Two new buggies have been built at a cost of \$142.78.

The No. 3 Chemical Engine is now being re-built. It was a two-wheeled engine for one horse. When completed it will answer for a chemical and supply wagon combined. Cost of material, \$200.

Two new single and three set of double harnesses have been made, besides a great amount of repairs at a cost of \$193.92 for stock.

Besides the repairs to apparatus, etc., there has been a great amount of work done for the fire alarm telegraph, in the way of posts for fire alarm boxes and hard rubber terminals for connecting the cables above ground. The cost of this is included in the expense of the shop.

The total cost of material used for repairs to apparatus, harnesses, and new work amounts to \$2,507.98. The total hours of labor performed is 17,786, which at the rate of 30 cents per hour amounts to \$5,335.80.

HORSES.

The horses in active service number one hundred and fourteen (114), fifteen (15) of which have been purchased during the year at a cost of three thousand two hundred and thirty-five dollars (\$3,235). There has been one death among the horses during the year, and there has been ten horses exchanged and sold that were unfit for further service, for the sum of seven hundred and twenty-five dollars (\$725). We have several more horses that are used-up for the department service that should be exchanged for new ones, or will sell to good advantage to the city. The average cost of hay during the year was seven dollars, ninety-four and one-half cents per ton (\$7.94½); oats, twenty-eight cents (28) per bushel. The actual cost of forage for the year was seven thousand, four hundred and six dollars and sixty-eight cents (\$7,406.68); sixty-four dollars and ninety-seven cents (\$64.97) per horse for the year; one dollar and twenty-five cents (\$1.25) per week per horse; or eighteen cents per day per horse. The accompanying report of the department veterinary surgeon gives statistics as to the diseases which have afflicted the horses of the department during the year. The average number of horses in the hospital during the year has been thirteen. The entire cost of medicine, liniment, etc., was one hundred and ninety-three dollars and eighty-three cents (\$193.83); salary of veterinary surgeon, three hundred dollars (\$300), making a total cost of four hundred and ninety-three dollars and eighty-three cents (\$493.83).

HOSE.

We have twenty-seven thousand, three hundred and fifty (27,350) feet of hose—of this amount nineteen thousand and fifty (19,050) feet of rubber hose, in good condition, seven thousand and fifty (7,050) in fair condition, and one thousand two hundred and fifty (1,250) feet of cotton in fair condition. There is also two thousand two hundred (2,200) feet of good chemical hose in service. There has been two thousand one hundred and fifty (2,150) feet of hose condemned and turned over to the water department for street sprinkling purposes. It will be necessary to purchase (8,000) feet of hose by April 1st, 1890, in order to have each company equipped with first-class hose.

FIRE ALARM TELEGRAPH.

This branch of the department has continued to work satisfactorily during the year.

We have purchased during the year, fifteen (15) fire alarm boxes, at a cost of three thousand, one hundred and twenty-five dollars (\$3,125). Ten keyless doors have been placed on boxes in the business district at a cost of four hundred dollars (\$400). The cost of battery supplies has been eight hundred and fourteen dollars and ninety-three cents (\$814.93); repairs, extensions and changing of lines, nine thousand and seventy-five dollars and ninety-three cents (\$9,075.93); new poles and wire, three hundred and forty-eight dollars and five cents (\$348.05). A large amount of work has been done in the way of placing the fire alarm wires underground. Cables have been placed underground in iron pipes and wooden boxes, leading to all the alarm boxes that are located a block distant from the streets where the main conduit is laid, also connections made to man-holes, and iron posts set for all boxes on line of conduit. All of the work has been done by the superintendent of fire alarm telegraph and men detailed from the force, except excavating and repaving. The iron posts upon which the boxes are to be placed are eight inches square, cast hollow, seven feet and six inches long, with base fourteen inches square, that sets on the curb or sidewalk. Two feet of the posts below the base sets in the ground and is cemented there. This makes them very firm. The cables are run to the post through iron pipe, and the wires are connected to a hard rubber terminal. This brings the end of the cable above ground, and by this means it can easily be tested by removing the door of the post, and avoids opening manholes and breaking connections in cable underground for testing. The cost for labor, paving, lumber, pipe, etc., amounts to one thousand two hundred and fifty dollars and sixteen cents (\$1,250.16). Forty-six thousand one hundred and ten (46,110) feet of cable have been purchased at a cost of seven thousand, nine hundred and thirty-five dollars and eighteen cents (\$7,935.18). By February 1st, 1890, we expected

to have our lines working underground on Hennepin, Nicollet and Washington avenues, Fourth street and Third avenue north, but we have received notice from the Minneapolis Street Railway Company that the Dorsett system of conduit will have to be lowered six feet on all streets and avenues where the cable line crosses it. It will be impossible for us to go on with the work of placing the cables underground without a large additional expense, until the conduit is lowered at the points of crossing the cable lines. The system being put in is original with the department, so far as running to boxes and making connections to ends of cables above ground. We are sparing no time or pains to make the system as perfect as possible. It will cost about two thousand dollars (\$2,000) to complete the system as far as contemplated.

The following is a summary of labor performed upon the fire alarm and police telegraph lines, by and under the supervision of Z. T. Morrison:

New poles re-set.....	100
Old poles re-set.....	50
New overhead wire strung, miles.....	10
Signal stations changed.....	10
New signal boxes placed in service.....	15
New gongs placed in service.....	2
Relay bells placed in service.....	1
Iron and wooden asphalt treated conduit and laterals laid, feet.....	4,000
Standard underground two and six wire cable laid, feet.....	6,000
Single wire, feet.....	29,400
Iron posts set.....	18

The telegraph department is composed of the following: 124 miles of wire and poles, 1 10-circuit repeater, 510 cells of battery, 182 fire alarm boxes, 22 engine house gongs, 10 engineer's gongs, 1 4-circuit repeater, not in service, 1 bell striker, not in service.

It will be necessary to purchase twenty new boxes this year. For a detailed statement I would refer you to the annual report of Superintendent Morrison.

WATER SUPPLY.

The water supply for fire extinguishing purposes was improved during the year by the addition of one hundred and fifteen (115) hydrants and nine (9) miles one thousand and fifty-four (1,054) feet of water mains. The pumping station at Shingle creek is completed. The city at this writing is supplied with water from this station by two Worthington Compound Duplex steam pumps, with a capacity of fifteen million (15,000,000) gallons each. This, with the East and West Side stations, gives a total capacity of eighty million (80,000,000) gallons daily.

I beg leave to again call your attention to the necessity of an increase in size of the water mains in the central portion of the city. The department has always experienced a great deal of trouble on Nicollet avenue by suction filling up for the first half hour with sand, sawdust, bark, etc. I would most respectfully recommend that a twenty-four inch main be substituted for the six inch on Nicollet avenue from Third street to Twelfth street, and connected with the sixteen inch main on Third street, and the twenty-four inch main on Twelfth street, and connected to all mains crossing Nicollet avenue. Also that two hydrants be set at each street crossing and two in center of each block on opposite sides of avenue, all connected to the twenty-four inch main. Unless this is done the work of the department cannot be satisfactory. I would further recommend that all mains crossing each other be connected, instead of running over or under, thus doing away with the duplex system, as contemplated by a former engineer of the water department. This system is not practicable, and would not be if completed. By connecting all the mains together, it would give a free and perfect circulation, and when a heavy draft is made at any one point the water will be supplied through all mains, instead of, as at present, by two or three mains running into that district, fed a long distance without any re-enforcement. I would also recommend that in the center of the city several connections be made with not less than six or eight inch pipe, with gate direct from main to sewer, and that they be opened once a week to flush the mains, as by this means we will get clean water. Would also recommend a systematic increase in number of hydrants in thickly settled portion of the city.

The water department has laid during the year 52,574.3 feet of mains, as follows:

6 inch.....	14,793.7 feet	or	2 miles 4,233.3 feet.
8 ".....	6,111.1 "	1 "	831.1 "
12 ".....	10,435.9 "	1 "	4,155.9 "
16 ".....	11,795.5 "	2 "	1,235.5 "
24 ".....	9,438.1 "	1 "	4,158.1 "
Totals.....	52,574.3	9	1,054

This makes a total of about 150 miles of all kinds of water mains laid in the city. The total number of hydrants in use is one thousand seven hundred and seventy-seven (1,777). The whole number of hydrants in use is classified as follows:

Flush or surface.....	18
Post hydrants.....	1,759
Total.....	1,777

FIRE STATIONS.

The usual incidental work of repairs and improvement in construction has been carried on at the several houses, embracing the renewal of floors and floor-joists. New floors have been laid in several houses at a cost of \$2,272.83. The lumber used was Georgia pine, three inches thick, six inches wide, of various lengths, beveled spikes countersunk $1\frac{1}{2}$ inches, plugged, caulked and pitched to make it water tight, same as a ship's deck. This floor will last from eight to ten years. With common pine, we had to renew the floors once every year. All of this work was done by members of the force. There are five houses to have new floors, and 50,000 feet of Georgia pine has been ordered for same.

This is the first year in the past six, but that we have built one or two houses. This year there seemed to be no available funds for that purpose, although the legislature authorized bonds to the amount of seventy thousand dollars (\$70,000.00) to be expended for permanent improvements in the fire department. There should be built this year at least two outside stations and one central station. The rapid growth of the city demands it.

CASUALTIES.

The following is a list in detail of casualties at fires, to others than members of the department:

April 17th, 1889, Mrs. C. Elliott, residing at 729 Washington Avenue North, was burned by gasoline, from the effects of which she died the next day.

July 7th, 1889, at 3500 Eighteen-and-a-half Avenue South, a boy twelve years old went into a barn to save a horse, and was burned to death.

November 30th, 1889, corner First Avenue South and Fourth Street, seven persons were killed; four on fire-escape by one falling and knocking off three others, two fell in trying to escape by telegraph wires, and one slipped and fell from sixth story window and was instantly killed.

PERSONS RESCUED.

The following is a list of cases occurring during the past year, in which persons in peril have been rescued by members of this department:

February 5th, 1889, at 209 Nicollet Avenue, three persons were rescued from a three story building, by members of H. & L. Co.'s Nos. 1 and 2.

November 30th, 1889, corner of Fourth Street and First Avenue South, eight story brick building, known as the Tribune Building, twenty-seven persons were rescued from the sixth and seventh stories by means of ladders, after all other means of retreat had been cut off.

ROLL OF MERIT.

There has been recorded on the roll of merit for the year 1889, the names of Nicolay Jurgens and Jno. F. Hoy, they having performed heroic services at the Tribune Building fire, November 30th.

ACCIDENTS TO MEMBERS.

The accidents to members of the department have been thirty, seven less than last year. Unfortunately, one was of a very serious nature. James Quigley, assistant engineer of engine Co. No. 1, while operating engine at a fire, August 3d, accidentally caught his right arm in fly wheel and crushed it so that it was

necessary to amputate it two inches from the shoulder. The injuries received have caused him to become physically unable to perform active duty. He is still on the roll at half pay, and is also placed on the pension roll of the fire department relief association, commencing October 1, 1889. Charles Hunstock, who has been in the service fifteen years, has lost the use of his right hand and was placed on the pension roll, October 1, 1889.

The following is a list of accidents that have occurred to members of the department during the past year:

CASUALTIES.

Date.	Names.	Companies.	Box.	Injuries.
1889.				
Jan. 9.	H. W. Cole.....	Chemical Co. No. 1	625	Sprained ankle.
13.	Nicholas Steffes.....	Engine " " 14		Injured in quarters.
28.	W. C. Kelley.....	H. & L. " " 3	219	Left thigh injured.
Feb. 3.	T. C. Horton.....	Engine " " 7	219	Exposure.
Mar. 29.	Sam Lockhart.....	Engine " " 10		Injured in quarters.
April 2.	W. H. McDonald.....	Engine " " 11	43	Sprained ankle.
May 3.	Dennis Gorey.....	H. & L. " " 2	9	Injury to testicles.
June 1.	C. L. Mitchell.....	Engine " " 8	9	Shoulders, head and lip cut.
20.	Chas. A. Saunders.....	Engine " " 12		Kicked by horse in quarters.
22.	Wm. G. Volkert.....	H. & L. " " 4		Two fingers bruised.
23.	Frank Vezina.....	Engine " " 11	134	Left wrist sprained.
July 16.	G. F. Wilson.....	H. & L. " " 2		Arm bruised in repair shop.
7.	F. W. Vogel.....	H. & L. " " 4	438	Exposure.
Aug. 3.	J. M. Quigley.....	Engine " " 1	16	Right arm crushed; amputation.
15.	J. J. Murphy.....	Chemical " " 2		Ankle sprained in quarters.
22.	Robt. Ehernburg.....	H. & L. " " 1		Knee sprained in quarters.
26.	W. M. Benolkin.....	Engine " " 12	16	Bruised back.
Sept. 18.	S. E. Hutchinson.....	H. & L. " " 1	19	Cut by glass.
29.	E. Felsing.....	H. & L. " " 1	41	Cut by glass.
29.	Nic. Jurgens.....	H. & L. " " 1	41	Cut by glass.
Oct. 1.	S. H. Cryrier.....	Engine " " 12	Still	Toe crushed.
4.	J. A. Bray.....	Engine " " 12	134	Hands and face burned.
Nov. 6.	Ben Wood.....	Engine " " 7		Sprained hand in quarters.
29.	Chas. Craigie.....	Engine " " 3	316	Bruised shoulder and hip.
30.	J. J. Murphy.....	Chemical " " 2	8	Toe crushed by brick.
30.	Jno. F. Hoy.....	H. & L. " " 1	8	Hand burned.
Dec. 3.	Ed Prescott.....	Chemical " " 1	14	Nose cut by glass.
14.	Nich. Mangen.....	Engine " " 12	136	Cut by glass.
14.	N. Thielen.....	Engine " " 2	143	Nail in hand.
17.	Ira Simons.....	H. & L. " " 5		Injured in quarters.
20.	J. W. Manning.....	Engine " " 9	139	Nail in hand.

During the year the Relief Association connected with this department has paid, besides accident claims, seventeen claims for sickness, amounting to \$1,639.79.

During the year eleven members of the department were promoted, two suspended with loss of pay, three fined, four fined and transferred, five reduced to an inferior position for cause, three discharged, five resigned in good standing and sixteen were reprimanded. The discipline and efficiency of the force will compare favorably with other years.

FIRES AND ALARMS.

During the twelve months the department has responded to four hundred and ninety-five alarms of all classes. The alarms given are classified as follows: 326 by fire alarm telegraph, 104 stills, 17 by American District Telegraph, 32 by telephone, five personal service, three second alarms, one second and third alarm combined, one general alarm, five special calls and one special call out of the city, answered by Engine Co. No. 4, called to Minnetonka Beach, Major Camp's residence destroyed.

Number of miles run by apparatus to fires, 3,051, making a total distance traveled to and from fires, 6,102 miles, an average of 153 miles to each apparatus. Hose No. 10 traveled the longest distance, 159 miles, H. & L. No. 5 the shortest distance, 9 miles. Hose companies have laid 302,800 feet of hose, or about 57½ miles. Hose No. 1 laid the greatest number of feet, 37,700; Hose 15 the least number, 5,950 feet.

Hook and ladder companies have raised 8,624 feet of ladders and discharged 230 charges of small chemical: the chemical engines have discharged 176 charges from their tanks, making a total of 13,841 gallons of carbonic acid gas used during the year.

Companies have averaged 77 hours and 50 minutes each on fire duty. Supply wagon No. 1 the longest time, 176 hours and 40 minutes; Chemical No. 3 the shortest time, 7 hours and 20 minutes. Total 3,197 hours and 15 minutes' work. Fifty-three rubber covers have been spread.

The following is distance traveled to and from fires by officers of the department:

Chief engineer.....	6,068	blocks or	466	miles, 10	blocks
First assistant engineer.....	4,868	"	374	"	6
Second assistant engineer.....	5,002	"	384	"	10
Total.....	15,938	"	1,226	"	
Total distance traveled both ways			2,452	"	

There has been only one notable fire during the year—the Tribune building. There comes a time in the history of every city when great fires occur, and in consequence lives are lost and property sometimes extending into the millions is swept away. Human ingenuity has not yet devised any apparatus or plan of action on the part of fire departments that will, with absolute certainty, render such losses resulting therefrom impossible. There are too many factors entering into such circumstances which are entirely beyond the control of fire departments. Carelessness in the use of fires, used either for heating or power purposes, also in the use of and care of inflammable materials may be charged as the initial causes of many fires. Incendiarism, too, with its deft hand and stealthy step, plays a deplorable criminal part in the origin of fires. Lessees and employes, on discovery of fires, neglect to give an alarm promptly to the fire department. They too often try to extinguish them without proper appliances, and in many cases through ignorance and anxiety they accomplish nothing. But, in one way or another, it is the experience of every large city to have destructive fires, and when great fires occur, resulting in large losses, it is customary to attach blame to somebody. The year 1889 has resulted in giving Minneapolis one quite expensive fire, and as a consequence our department and its management have received some blame and censure by the lessors of the Tribune building and others, which blame, however, is not deserved. Let us see in the light of actual facts, which cannot be truthfully contradicted, how much blame we really have earned at this fire. The building was eight stories high, used as a printing establishment, with fifty to sixty people in the sixth and seventh stories at the time of the fire. The night elevator man first discovered the fire on the third floor, and gave the alarm to the occupants, and many of them took the elevator and went down and out of the building. Others came down the stairs to the third floor, among them was the editor and a number of reporters who thought they could put the fire out. A bucket or two of water thrown on a fire at its first discovery will, in many instances, extinguish it, but if not done quickly and promptly, it may require thousands of gallons, or even tons, to put it out. The editor went back to the seventh floor and secured a "Babcock." The people remaining on the seventh floor were informed that "the fire was down on the third floor and did not amount to anything—it would be all out in a few minutes." In the meantime the reporters had secured a table and a number of hand grenades, the door where the fire was was forced open, the table applied and the hand grenades thrown with great force and excitement, some through the windows, giving the fire draught, and some on the fire, with as much effect as a corresponding number of goose eggs would have had. By this time the editor with the "Babcock" had arrived on the scene, and the man with the table said: "Somebody go and turn in a fire alarm," and three police calls were immediately sent in. The editor with the "Babcock" extinguisher could not use it, for at that moment the flames burst through the open door, setting the stairs on fire. Of the would-be chief and firemen, some of them rushed through the fire down the stairs, others boarded the elevator and made good their escape to the ground floor, crying "fire." A hack-driver standing a block away heard the cry, and looking in that direction, saw fire in the third, fourth and fifth stories of the building. He ran to the nearest box and turned in the alarm. A man by the name of Holt, who had formerly been employed as elevator man, took the elevator, as soon as the fire-fighters had left it, made a trip to the seventh story and came back with a load of people. He attempted to go again, but could not go higher than the fourth

floor, as the stairs and elevator shaft above were a mass of flame. Some of those remaining in the sixth and seventh stories took to the fire escape, and coming down one man lost his hold, fell and knocked off three others. All were killed. Two others were in a room on the seventh floor, opposite the elevator and stairway. The flames burst through the transom, they went to the window and attempted to escape by means of telegraph wires, but both fell to the engine room roof and were killed. Twenty-eight others went to the east end of the building, or First avenue south side, farthest from the fire, and waited until the arrival of the aerial ladder. All were rescued, except one, who fell and was instantly killed. Chemical Co. No. 1 started for the fire, one block away, just as the box alarm came to the department, but the fire had made such headway that they could not go up the stairs, only to the bottom of the flight leading to the third floor, on account of debris and tiling falling. They came out and assisted in caring for the unfortunates who had fallen from the fire-escape. At this time engine companies arrived, and before water could be brought to bear on the burning building the flames had spread over the entire eighth story and roof. The alarm was given at 10:17 p. m., and at 10:30 p. m. the sixth and seventh stories were a furnace of fire and the eighth story and roof had fallen. The sixth story was filled with heavy machinery, and when the floor gave way the heavy presses carried fire and everything in their course to the basement. The fire was confined to the one building. The cause of the fire is unknown. The loss amounted to about \$200,000.

Losses occasioned by fire the past year as near as could be ascertained, on buildings, \$121,755.91 and on contents, \$151,119.75, making a total of \$272,875.66 covered by insurance amounting to \$1,181,054. Insurance paid, \$260,000; loss above insurance paid, \$12,875.66; the premiums received by fire insurance companies doing business in the city amount to \$1,018,563.39 for the year of 1889; less \$260,000 losses paid in the same period, gross profits \$758,563.39. Deduct 33½ per cent. on premiums, claimed as the average cost of transacting the insurance business, \$339,521.13 net profits of \$419,042.26. The following is an exhibit of the losses and insurance for each year, commencing with the year 1880, with addition of the year 1889:

Year.	Losses.	Insurance Paid.
1880.....	\$191,442.00	\$168,102.00
1881.....	439,421.72	414,901.72
1882.....	410,209.67	374,143.56
1883.....	660,079.00	479,905.11
1884.....	234,854.64	177,539.81
1885.....	233,349.50	168,673.79
1886.....	313,337.16	266,667.39
1887.....	1,360,247.61	1,277,540.74
1888.....	104,316.00	90,000.00
1889.....	272,875.66	260,000.00
Total.....	\$4,220,132.96	\$3,677,474.12

The average loss these ten consecutive years has been \$422,013.29 and the average insurance received \$367,747.41; the annual premiums received for ten years are \$715,719.98 per annum, total of \$7,157,199.84; less \$3,677,474.12 losses paid in same period, gross profits \$3,479,725.72; deduct 33½ per cent. on premiums, claimed as the average cost for the transaction of the insurance business \$2,385,733.28, net profits, \$1,093,992.44 or a profit of \$109,399.24 a year for ten years to insurance companies doing business in this city. The St Anthony Elevator loss of 1887 is included in the above table.

EXPENDITURES.

The total expenditures in this department the past twelve months amount to \$240,678.53. For ten months, from March 1st, 1889, to December 31st, 1889, \$202,841.08. The expenses are classified as follows:

Salaries.....	\$182,885.23
Fuel and lights.....	4,754.01
Expense of horses.....	8,811.68
Repairs to apparatus and building.....	7,276.73
Expense of fire alarm telegraph.....	11,291.66
Storeroom supplies.....	1,419.13
Property purchased.....	19,987.93
Running expenses.....	4,252.16
Total.....	\$240,678.53
Expenses from January 1st to March 1st.....	37,837.45

Total expense ten months.....

\$202,841.08

CR.

Nine horses sold, money turned over to general fund.....	\$500.00	
Collars, harness and weights.....	46.80	
Fifty-eight acid carboys.....	52.20	
		599.00
Actual expenditures.....		\$202,242.08
Paid out of permanent improvement fund for lot corner James and Fifth avenue N.....	\$1,400.00	
Plumbing and steam heat plant for Station P.....	973.46	
	\$2,373.46	

The value of fire department property is estimated as follows:

Apparatus and equipments.....	\$139,775.00
Buildings.....	149,568.65
Real estate.....	199,450.00
Fire alarm telegraph property.....	47,135.62
	\$535,929.27

For a complete and detailed exhibit of expenditures I would respectfully refer you to exhibits accompanying this report, which I trust will prove satisfactory to your honorable body.

Exhibit A shows the organization, number, location and roster of each company; and the class, manufacture and time of service of each apparatus.

Exhibit B, statement of expenditures, etc.

Exhibit C, workings of the department.

Exhibit D, causes of fires, buildings, how occupied, etc.

Exhibit E is the report of the superintendent of fire alarm and police telegraph.

Exhibit F is the report of the veterinary officer, with tabular statement.

RECOMMENDATIONS.

The increase in the number of buildings in all parts of the city, also the increased miles of territory and number of buildings in same, makes it an absolute necessity that the department be increased, in order that it may keep pace with the rapid growth of the city.

No permanent improvements were made this year in the department, although the legislature ordered bonds to the amount of \$70,000 to be used in the fire department during the years 1889-90. The fire department has failed to receive any of it, and no one seems to be able to explain why. One hook and ladder company and one hose company were added to the service this year. Our department has less men and apparatus and has had more fires and alarms during the past year, than any other city the same size and population in the United States. I would therefore ask your honorable body for the following additions to the force during the present year, or at least as many as the finances of the city will possibly permit, viz:

One engine company with ten men and one hook and ladder company with twelve men, with quarters on Fourth street north. These companies would be centrally located in the wholesale and business part of the city.

One engine company with nine men, with quarters on Fifth avenue north and James avenue. A company located as above will give protection to a large amount of property, the nearest apparatus to which at present is one and two miles distant.

A lot purchased and house built, and hook and ladder and chemical company located in the vicinity of Portland avenue and Twenty-fourth street.

The old house, corner of Main street and Thirteenth avenue northeast, now occupied by Hose Company No. 2, will have to be re-built and enlarged to accommodate a steamer. If there is not something done soon it will fall down. I have several times called the attention of the council to the condition of this house and the necessity of placing a steamer therein. Some action should be taken in the matter at once.

Two additional men should be added to Hook and Ladder Companies Nos. 1 and 3, respectively, and a chemical engine purchased and placed in the quarters of Hook and Ladder Company No. 3, and operated in connection with same.

A portable water tower should be purchased and placed in service as soon as possible and three men appointed for the care and operation of the same.

The residence portion of the city must not be lost sight of, particularly the territory built up during the past two or three years. To meet these demands, I would advise that property be purchased in the following localities, and that apparatus and companies be placed in service, if not all during the present year, at as early a date thereafter as possible, viz: Summit and Hennepin avenues, West Thirty-third street and Dupont avenue, East Lake street and Twenty-seventh avenue south, Bloomington avenue and Thirty-second street, Third avenue south and Thirty-eighth street, University avenue and Nineteenth avenue southeast.

In Boston, New York and Chicago, I have witnessed from fifteen to twenty-five engines at work, all within a distance of five hundred feet of the fire. If twenty engines were at work at a fire in this city, a man would have to walk around several blocks to see them all. The number of hydrants should be increased, particularly in the business portion of the city, or other facilities furnished so that at least double the present number of engines can be placed within a radius of four or five hundred feet. Cisterns should be placed at the street corners throughout the business portion of the city, and connected directly with the water mains, as is done in Chicago. These cisterns would prove of incalculable value to the department, not alone in getting into service in quicker time, but better service would be had from our engines, on account of the shorter leads of hose required to reach the fire, and in addition the apparatus would be more concentrated about a fire, as each cistern would accommodate four engines.

Would also recommend the purchase of twelve life-saving nets and the appointment of two district engineers, furnished with horses and wagons; also the organization of a salvage corps.

CONCLUSION.

I desire to return sincere thanks to his honor the mayor, to your honorable body the common council, to the comptroller, Mr. Calderwood, to the city treasurer and his assistant, Messrs. Moulton and Modisette, to the officers of the water department, and all other city officials, with whom I have had official dealings, for their uniform kindness and courteous attention, and to the police department and Superintendent Brackett for their assistance at fires. For my faithful and industrious assistant chiefs, I have but praise, and to all other officers and members of this department, I am most grateful for their courage and gentlemanly deportment, and unwavering devotion to duty at all times, in the face of the perils of the service.

To the gentlemen of the fire committee I am under renewed obligations for their kind and courteous considerations shown to the department at all times.

Respectfully submitted,

F. L. STETSON,
Chief Engineer Fire Department.

Exhibit A.**ENGINE COMPANY No. 1.***Corner of Third Street and Sixth Avenue South.*

This is a first-class piston engine, built by the Amoskeag Manufacturing Company, at Manchester, New Hampshire; has been in service six years; weight as drawn to fires, 8,610 pounds; is drawn by three horses, attended by one four-wheeled hose carriage drawn by two horses capable of carrying 1,000 feet of hose; has been in service three years and six months.

Members.	Age.	Nativity.	Former Occupation.	Position.
Michael Hanley	40	United States.	Locomotive fireman. . .	Captain.
Thos. J. McElroy	28	United States.	Laborer	Lieutenant.
John Horton	42	Ireland	Edge sawyer	Pipeman.
Jas. F. Agnew	25	Canada	Tinsmith	Pipeman.
Albert Snyder	26	Germany	Lumberman	Pipeman.
Matthew Coyle	37	Ireland	Sawyer	Engineer.
Richard D. Nolan	32	United States.	Locomotive fireman	Assistant engineer.
James Brady	25	United States.	Teamster	Driver steamer.
Jno. T. McBride	35	Canada	Teamster	Driver hose.
*Jas. Quigley	30	United States.	Teamster	

*Disabled; on pension roll.

ENGINE COMPANY No. 3.*No. 43 Third Street South.*

This is a first-class Ahrens piston engine, built by the Ahrens Manufacturing Company, Cincinnati, Ohio, and has been in service three years and four months; weight as drawn to fires, 9,000 pounds; is drawn by three horses.

Members.	Age.	Nativity.	Former Occupation.	Position.
Herbert E. Penney ..	30	United States.	Machinist	Engineer.
Stephen P. Wright ..	31	United States.	Engineer	Assistant engineer.
Jos. E. Krake	33	United States.	Laborer	Driver steamer.

ENGINE COMPANY No. 4.*Twelfth Avenue North Between Washington Avenue and Third Street,*

This is a second-class Amoskeag piston engine, built by the Manchester Locomotive Works, Manchester, N. H.; has been in service six years and three months; weight as drawn to fires, 7,700 pounds; is drawn by four horses; attended by No. 4 hose carriage, four wheels, drawn by two horses, capable of carrying 1,000 feet of hose.

Members.	Age.	Nativity.	Former Occupation.	Position.
William J. Hart	31	United States.	Tackmaker	Captain.
Theo. Kenning	37	Germany	Carpenter	Lieutenant.
George Kersten	34	Germany	Carpenter	Pipeman.
Frank Board	27	United States.	Teamster	Pipeman.
Frank H. Babcock ..	25	United States.	Locomotive engineer ..	Pipeman.
Wm. E. Richmond ..	35	United States.	Locomotive engineer ..	Engineer.
Oliver H. Foster	29	United States.	Steamfitter	Assistant engineer.
Thos. W. Eastman ..	29	United States.	Teamster	Driver steamer.
Joseph Steffes	46	Germany	Laborer	Driver hose.

ENGINE COMPANY No. 5.*Corner Fifteenth Avenue South and Fourth Street.*

This is a second-class Clapp & Jones piston engine, built by the Clapp & Jones Manufacturing Company, Hudson, N. Y.; has been in service two years and two months; weight as drawn to fires 7,770 pounds; drawn by three horses, attended by No. 5 hose carriage, four wheels, drawn by two horses; capable of carrying 1,000 feet of hose; has been in service six years.

Members.	Age.	Nativity.	Former Occupation.	Position.
Robert W. York.....	49	Canada.....	Carpenter.....	Captain.
Jno. C. Sullivan.....	33	Ireland.....	Miller.....	Lieutenant.
Oliver A. Burnes.....	34	Scotland.....	Cooper.....	Pipeman.
James McDonald.....	36	Ireland.....	Cooper.....	Pipeman.
P. W. McElroy.....	39	United States.	Stonemason.....	Pipeman.
Dan E. Gonsolus.....	37	Canada.....	Brassfinisher.....	Engineer.
Henry H. Winslow.....	35	United States.	Teamster.....	Assistant engineer.
James Hoy.....	28	United States.	Teamster.....	Driver steamer.
John Hale.....	46	United States.	Gasfitter.....	Driver hose.

ENGINE COMPANY No. 6.*Corner of Twelfth Street and Third Avenue South.*

This is a first-class piston engine, built by the Ahrens Manufacturing Company, Cincinnati, Ohio; has been in service four years and seven months; weight as drawn to fires, 8,300 pounds; is drawn by four horses, attended by one four-wheel hose carriage, drawn by two horses, capable of carrying 1,000 feet of hose.

Members.	Age.	Nativity.	Former Occupation.	Position.
Jas. R. Canterbury..	32	United States.	Cooper	Captain.
Fred. W. Schambeck	28	United States.	Clerk	Lieutenant.
Kimball W. Davies..	28	United States.	Laborer	Pipeman.
Jno. A. Gies.....	28	United States.	Butcher	Pipeman.
Wm. O'Brien.....	28	United States.	Teamster	Pipeman.
William Allen.....	30	United States.	Cooper.....	Pipeman.
William H. West.....	30	United States.	Blacksmith.....	Engineer.
Jno. W. Allan.....	27	United States.	Carriage maker.....	Assistant Engineer.
Egbert S. Wilson.....	40	United States.	Lumberman	Driver steamer.
C. C. Horton.....	41	England.....	Cooper	Driver Hose.

ENGINE COMPANY No. 7.*Near Corner of Twenty-first Avenue South and Franklin.*

This is a second-class piston engine, built by the Amoskeag Manufacturing Company, Manchester, N. H.; has been in service fifteen years and four months; weight as drawn to fires, 7,837 pounds; is drawn by four horses; attended by No. 7 hose carriage, four wheel, drawn by two horses; capable of carrying one thousand feet of hose.

Members.	Age.	Nativity.	Former Occupation.	Position.
Jos. C. Hernlund.....	30	Sweden	Clerk	Captain.
Geo. H. Smith.....	45	Germany	Shoemaker.....	Lieutenant.
Jas. P. Murphy.....	40	United States.	Laborer	Pipeman.
Thos. C. Horton.....	39	England.....	Cooper	Pipeman.
James Slater.....	27	United States.	Teamster	Pipeman.
Michael O'Sullivan..	45	Ireland	Lumberman	Engineer.
Phineas W. Mixer...	28	United States.	Locomotive Engineer..	Assistant Engineer.
Benjamin Wood.....	43	United States.	Teamster	Driver steamer.
Cicero M. Robb.....	43	United States.	Glove cutter.....	Driver Hose.

ENGINE COMPANY No. 8.*Corner of Twenty-eighth Street and Blaisdell Avenue.*

This is a second-class Amoskeag piston engine, built by the Manchester Locomotive Works, Manchester, N. H.; has been in service seven years and two months; weight as drawn to fires, 7,500 pounds; is drawn by four horses; attended by one four-wheel hose carriage drawn by two horses, capable of carrying 1,000 feet of hose.

Members.	Age.	Nativity.	Former Occupation.	Position.
Ernest Cadwell.....	29	United States.	Mattress maker.....	Captain.
Wallace Jewell.....	32	United States.	Laborer.....	Lieutenant.
C. L. Mitchell.....	38	United States.	Carpenter.....	Pipeman.
Merritt M. Daily.....	29	United States.	Laborer.....	Pipeman.
William A. Burho.....	33	Nova Scotia...	Blacksmith.....	Pipeman.
Stephen McBride.....	40	United States.	Teamster.....	Engineer.
Jno. E. Taylor.....	36	United States.	Locomotive fireman...	Assistant engineer.
David T. Bean.....	27	United States.	Laborer.....	Driver steamer.
William Blair.....	35	United States.	Teamster.....	Driver hose.

ENGINE COMPANY No. 9.*Corner Seventh Avenue Southeast and Eighth Street.*

This is a first-class piston engine, built by the Clapp & Jones Manufacturing Company, Hudson, N. Y.; has been in service one year; weight as drawn to fires, 8,000 pounds; drawn by four horses; attended by one four-wheel hose carriage, capable of carrying 1,000 feet of hose; has been in service four years and five months.

Members.	Age.	Nativity.	Former Occupation.	Position.
Edward Cayton.....	29	United States.	Upholsterer.....	Captain.
Geo. Marden.....	31	United States.	Millman.....	Lieutenant.
Wm. A. Gonyea.....	27	France.....	Laborer.....	Pipeman.
J. W. Manning.....	28	United States.	Harnessmaker.....	Pipeman.
Chas. C. Lane.....	29	United States.	Laborer.....	Pipeman.
Chas. N. Watts.....	34	United States.	Engineer.....	Engineer.
Ira W. Haven.....	23	United States.	Locomotive engineer...	Assistant engineer.
Chas. W. Pierce.....	26	United States.	Sawyer.....	Driver steamer.
Arthur M. Niles.....	24	United States.	Carpenter.....	Driver hose.

ENGINE COMPANY No. 10.*Holden Street. Oak Lake Addition.*

This is a first-class La France piston engine, built by the La France Fire Engine Company, Elmira, N. Y.; has been in service two years; weight as drawn to fires 9,350 pounds; is drawn by four horses; attended by No. 10 Hose Carriage, four-wheel, capable of carrying 1,000 feet of hose; has been in service three years and one month.

Members.	Age.	Nativity.	Former Occupation.	Position.
Willard Pollock.....	36	United States.	Tinner.....	Captain.
A. F. Krake.....	32	United States.	Teamster.....	Lieutenant.
Sam M. Lockhart.....	32	United States.	Laborer.....	Pipeman.
Geo. H. Smith.....	27	N. Brunswick.	Clerk.....	Pipeman.
Thos. J. Coleman.....	25	United States.	Teamster.....	Pipeman.
Chas. E. Price.....	33	United States.	Machinist.....	Engineer.
E. B. Mayo.....	30	United States.	Locomotive engineer...	Assistant engineer.
Keron J. Broderick...	37	United States.	Teamster.....	Driver steamer.
Robert Davis.....	31	England.....	Shingle packer.....	Driver hose.

ENGINE COMPANY No. 11.*24 to 32 Second Street Southeast.*

This is a first-class Ahrens piston engine, built by the Ahrens Manufacturing Company, Cincinnati, Ohio; has been in service three years and three months; weight as drawn to fires, 9,000 pounds; is drawn by four horses; attended by one four-wheel hose carriage, drawn by two horses; capable of carrying 1,000 feet of hose; has been in service three years and four months.

Members.	Age.	Nativity.	Former Occupation.	Position.
Mathias Gates.....	32	Germany.....	Carpenter.....	Captain.
Sandy, Hamilton.....	25	Scotland.....	Laborer.....	Lieutenant.
Louis Livingston.....	28	France.....	Millman.....	Pipeman.
Wm. H. McDonald.....	24	United States.	Millman.....	Pipeman.
Frank Vezina.....	25	France.....	Carpenter.....	Pipeman.
Edward I. Kingsley.....	33	United States.	Locomotive fireman....	Engineer.
Thos. E. McGolrick.....	29	United States.	Machinist.....	Assistant engineer.
Chas. O. Pierce.....	54	United States.	Teamster.....	Driver steamer.
Hillman Gould.....	38	United States.	Teamster.....	Driver hose.

ENGINE COMPANY No. 12.*Corner of Summer and Jackson Streets Northeast.*

This is a second-class piston engine, built by the Clapp & Jones Manufacturing Company, Hudson, N. Y.; has been in service one year; weight as drawn to fires, 6,880 pounds, drawn by three horses, attended by one four-wheel hose carriage, drawn by two horses, capable of carrying 1,000 feet of hose; has been in service eleven years and five months.

Members.	Age.	Nativity.	Former Occupation.	Position.
Nicholas Mangen....	34	Germany.....	Blacksmith.....	Captain.
Patrick T. Quinn....	39	Ireland.....	Laborer.....	Lieutenant.
Solomon H. Cyrrier....	35	France.....	Machinist.....	Pipeman.
Jno. Benolkin.....	32	Germany.....	Boilermaker.....	Pipeman.
Wm. Benolkin.....	23	Germany.....	Clerk.....	Pipeman.
Jno. A. Gonstead.....	27	Norway.....	Locomotive engineer....	Engineer.
Fred B. Morse.....	29	United States.	Engineer.....	Assistant engineer.
Chas. Saunders.....	36	United States.	Lumberman.....	Driver steamer.
Joseph Bray.....	37	United States.	Millman.....	Driver hose.

ENGINE COMPANY No. 14.*Corner of Twenty-first Avenue North and Fourth Street.*

This is a second-class piston engine, built by the La France Fire Engine Company, Elmira, N. Y.; has been in service two years; weight as drawn to fires, 8,000 pounds; is drawn by three horses, attended by No. 14 hose carriage, four-wheel, two horses, capable of carrying 1,000 feet of hose; has been in service two years.

Members.	Age.	Nativity.	Former Occupation.	Position.
Nicholas Steffes....	39	Germany.....	Teamster.....	Captain.
Frederick Ralke.....	33	Germany.....	Carpenter.....	Lieutenant.
Octave Dupere.....	35	French Can'd'n	Carpenter.....	Pipeman.
J. W. Cheatham.....	33	United States.	Laborer.....	Pipeman.
Edward Stuth.....	28	Germany.....	Carpenter.....	Pipeman.
Chas. A. Gibbs.....	26	United States.	Upholster.....	Engineer.
Geo. Lund.....	34	Norway.....	Sailor.....	Assistant engineer.
Wallace Smith.....	35	United States.	Teamster.....	Driver steamer.
Andrew Beck.....	46	Germany.....	Cigar-maker.....	Driver hose.

HOSE COMPANY No. 2.*Corner of Main Street and Thirteenth Avenue Northeast.*

This is a four-wheel carriage built by the Fire Extinguisher Manufacturing Co.; has been in service twelve years; was formerly No. 3, and was rebuilt at Fire Department Repair Shop, September, 1889, weight as drawn to fires, 5,000 lbs.; is drawn by two horses, and is capable of carrying 1,000 feet of hose.

Members.	Age.	Nativity.	Former Occupation.	Position.
Nicholas Thielen.....	47	Germany	Painter.....	Captain.
Theo. S. Klares.....	30	Germany	Laborer.....	Lieutenant.
Jno. W. Scheffel.....	29	Germany	Laborer.....	Pipeman.
Nicholas Smith.....	27	Germany	Shingle Sawyer.....	Pipeman.
Wm. G. Walsh.....	29	United States.	Lumberman.....	Pipeman.
Peter Miller.....	46	United States.	Laborer.....	Driver hose.

HOSE COMPANY No. 3.*Corner of Second Street and Third Avenue North.*

This is a four-wheel carriage, built by the Fire Extinguisher Manufacturing Co., Chicago, Ill.; has been in service three years and five months; carries 1,000 feet of hose; drawn by two horses, weight, as drawn to fires, 5,000 lbs.

Members.	Age.	Nativity.	Former Occupation.	Position.
Christ Henry.....	43	Germany	Shoemaker.....	Captain.
Leonard Scharf.....	29	Germany	Cooper.....	Lieutenant.
Samuel C. Nelder.....	25	England	Teamster.....	Pipeman.
Thos. Meagher.....	26	Ireland	Blacksmith.....	Pipeman.
Chas. Craigie.....	28	Scotland.....	Teamster.....	Pipeman.
John Thies.....	37	Germany	Laborer.....	Driver hose.

HOSE COMPANY No. 13.*Seventeenth Avenue South Between Twenty-fifth and Twenty-sixth Streets.*

This is a four wheeled carriage; has been in service thirteen years; drawn by two horses; capable of carrying 1,000 feet of hose; weight as drawn to fires, 5,000 pounds.

Members.	Age.	Nativity.	Former Occupation.	Position.
William Malone.....	36	United States.	Carpenter.....	Captain.
Chas. W. Ringer.....	25	United States.	Teamster.....	Lieutenant.
Daniel Noonan.....	36	Ireland	Cooper.....	Pipeman.
Fred Malone.....	31	United States.	Carpenter.....	Pipeman.
Patrick J. Farrell...	27	Ireland	Printer	Pipeman.
William Kenney.....	45	Ireland.....	Cooper.....	Driver.

HOSE COMPANY No. 15.*Harrison Street and Twenty-fourth Avenue North East.*

This is a four-wheeled carriage, built by the Moline Pump Company, Moline, Ill.; been in service since March 15, 1889; capable of carrying 1,000 feet of hose; drawn by two horses, weight as drawn to fires, 5,000 pounds.

Members.	Age.	Nativity.	Former Occupation.	Position.
Sidney B. Wilson....	35	United States.	Upholsterer.....	Captain.
Loring D. Smith....	37	United States.	Planer.....	Lieutenant.
John H. W. Glazier..	43	United States.	Painter.....	Pipeman.
John Gravrock.....	29	Norway.....	Flour packer.....	Pipeman.
Albert E. Murphy....	27	United States.	Blacksmith.....	Pipeman.
Lester A. Carpenter.	24	United States.	Teamster.....	Driver.

HOOK AND LADDER COMPANY No. 1 AND SUPPLY No. 1.*Corner Second Street and Third Avenue North.*

This is an extra first-class turntable truck of the Hayes' patent with an 85-foot extension ladder, built by the La France Fire Engine Company, Elmira, N. Y.; has been in service since August 25, 1885; weight including 265 feet of ladders, 9,650 pounds, and is drawn by four horses. Supply Wagon No. 1 is run in connection with this truck; has been in service five years and seven months; built by P. H. Freese & Bro., Chicago, Ill.; weight, 4,200 pounds; is drawn by two horses, and carries two Babcock extinguishers, guard and life lines, fifty feet $3\frac{1}{4}$ -inch hose, and Siamese connection nozzle, etc., twenty-four covers, axes, handpump, large hook-chain and rope.

Members.	Age.	Nativity.	Former Occupation.	Position.
Charles Forster....	40	Germany.....	Printer.....	Captain.
George Kehoe.....	29	Ireland.....	Lumberman.....	Lieutenant.
Henry W. Steffens....	33	Germany.....	Harnessmaker.....	Ladderaman.
Edward Felsing.....	27	Germany.....	Laborer.....	Ladderaman.
Edward Thielen.....	27	Germany.....	Painter.....	Ladderaman.
Jno. F. Hoy.....	27	United States.	Housemover.....	Ladderaman.
Nicolay Jurgens.....	35	Norway.....	Sailor.....	Ladderaman.
Samuel Hutchinson..	26	N. Brunswick.	Lumberman.....	Ladderaman.
Robert Ehrenburg...	33	Germany.....	Carpenter.....	Tillerman.
John Hill.....	36	United States.	Teamster.....	Driver H. & L.
Geo. Seeliger.....	31	Germany.....	Laborer.....	Driver Supply Wagn.

HOOK AND LADDER COMPANY No. 2.*Nos. 24 to 32 Second Street Southeast.*

This is a second class steel truck, with modern improvements, including patent lever steering apparatus, built by the Fire Extinguisher Manufacturing Company, Chicago, Ill.; been in service two years; weight, including 277 feet of ladders, 7,500 pounds; is drawn by two horses.

Members.	Age.	Nativity.	Former Occupation.	Position.
William Traeger.....	31	Germany.....	Tinner.....	Captain.
James Lowry.....	37	United States.	Packer.....	Lieutenant.
*Obder Campbell.....	32	United States.	Laborer.....	Ladderaman.
David Lagesse.....	32	France.....	Shoemaker.....	Ladderaman.
Henry Rappa.....	29	Germany.....	Butcher.....	Ladderaman.
Fred. Wilson.....	24	United States.	Lath sawyer.....	Ladderaman.
Calixte H. Dumas....	26	Fr. Canadian..	Clerk.....	Ladderaman.
Dennis Gorey.....	29	Ireland.....	Millman.....	Tillerman.
Chas. F. Howe.....	23	United States.	Woodworker.....	Ladderaman.
A. A. Hoyte.....	43	United States.	Teamster.....	Driver H. & L.
Fred. Bohmbach....	28	United States.	Teamster.....	Driver Chemical.

*Detailed as driver to Chief Engineer.

HOOK AND LADDER COMPANY No. 3.*Corner of Fifteenth Avenue South and Fourth Street.*

This is a new "Aerial" Turntable truck with modern improvements, built by the Fire Extinguisher Manufacturing Company, Chicago, Ill.; been in service two years; weight, including 284 feet of ladders, 9,000 pounds; is drawn by four horses.

Members.	Age.	Nativity.	Former Occupation.	Position.
William O'Niell.....	32	Ireland.....	Laborer.....	Captain.
James Pearson.....	34	Canada.....	Harnessmaker.....	Lieutenant.
John Horan.....	31	United States.....	Tinner.....	Ladderman.
Michael Copely.....	46	Canada.....	Cooper.....	Ladderman.
Thomas Kehoe.....	31	Ireland.....	Bridge builder.....	Ladderman.
*John Barrett.....	26	Ireland.....	Laborer.....	Ladderman.
Niels C. Lund.....	31	Norway.....	Carpenter.....	Ladderman.
Adolph Porsch.....	30	Germany.....	Moulder.....	Tillerman.
Chas. D. Wendt.....	37	Germany.....	Laborer.....	Driver.

*Detailed as driver to Second Assistant Engineer.

HOOK AND LADDER COMPANY No. 4.*Twelfth Avenue North Between Washington Avenue and Third Street.*

This is a first-class steel truck, built by the Fire Extinguisher Manufacturing Company, Chicago, Ill.; has been in service since March, 1889; weight, 7,500 pounds; carries 242 feet of ladders, drawn by two horses.

Members.	Age.	Nativity.	Former Occupation.	Position.
Chas. H. Lent.....	38	United States.....	Bricklayer.....	Captain.
Fred W. Vogel.....	34	United States.....	Cooper.....	Lieutenant.
Michael Henry.....	36	Germany.....	Harness-maker.....	Ladderman.
*Fred Schuppel.....	30	Germany.....	Laborer.....	Ladderman.
Adolph G. Schlener.....	32	United States.....	Harness-maker.....	Ladderman.
Otto Lohff.....	25	Germany.....	Cooper.....	Ladderman.
Edward Llewellyn.....	25	United States.....	Lumberman.....	Ladderman.
William G. Volkert.....	30	United States.....	Cabinet-maker.....	Tillerman.
Albert J. Hart.....	36	United States.....	Carpenter.....	Driver.

*Detailed as driver to First Assistant Engineer.

HOOK AND LADDER COMPANY No. 5.*Corner of Twenty-eighth Street and Blaisdell Avenue.*

This is a second-class truck with modern improvements, including the segment steering apparatus; was built by the Fire Extinguisher Manufacturing Company, Chicago, Ill.; has been in service nine years and three months; weight, including 204 feet of ladders, 4,737 pounds; is drawn by two horses.

Members.	Age.	Nativity.	Former Occupation.	Position.
Jas. J. Murphy.....	42	Ireland.....	Wagon-maker.....	Captain.
Jno. Q. Gilman.....	38	United States.....	Blacksmith.....	Lieutenant.
William Kelley.....	44	Ireland.....	Cooper.....	Ladderman.
Lawrence Lyng.....	39	Ireland.....	Cooper.....	Ladderman.
Edmund Burke.....	27	United States.....	Cooper.....	Ladderman.
Alex. Shepard.....	26	Canada.....	Teamster.....	Ladderman.
Ira A. Simons.....	22	United States.....	Teamster.....	Ladderman.
H. C. H. Tuttle.....	22	United States.....	Teamster.....	Tillerman.
Geo. T. Bigowet.....	19	United States.....	Plumber.....	Ladderman.
William Winslow.....	27	United States.....	Laborer.....	Driver.

CHEMICAL ENGINE COMPANY No. 1.*No. 43 Third Street South.*

This apparatus was built by the Fire Extinguisher Manufacturing Company, Chicago, Ill.; has been in service six years and one month; weight when ready for use, 5,500 pounds; is drawn by two horses. This engine is substantially made, with two tanks or generators jacketed with brass, which are tested to 300 pounds hydrostatic pressure to the square inch. Carbonic acid gas is both the working and the extinguishing agent.

Members.	Age.	Nativity.	Former Occupation.	Position.
Louis Rober	34	United States.	Flour bolter.....	Captain.
Ed. H. Prescott.....	36	United States.	Millwright	Lieutenant.
Jerry Murphy.....	30	Ireland.....	Clerk	Pipeman.
Hollis W. Cole.....	28	United States.	Laborer.....	Pipeman.
John Cannon.....	47	United States.	Cooper.....	Driver.
*Frank Peterson.....	26	Sweden.....	Laborer.....	Pipeman.

*Detailed as Gateman.

CHEMICAL ENGINE COMPANY No. 2.*Corner Twenty-eighth Street and Blaisdell Avenue.*

This apparatus was built by the Fire Extinguisher Manufacturing Company, Chicago, Ill.; has been in service two years; weight when ready for use, 3,700 pounds; is drawn by two horses. This engine has two iron tanks or generators jacketed with brass, which are tested to three hundred pounds hydrostatic pressure to the square inch. Carbonic acid gas is both the working and extinguishing agent.

Members.	Age.	Nativity.	Former Occupation.	Position.
James J. Murphy....	42	Ireland	Wagonmaker	Captain.
John Q. Gilman.....	39	United States.	Blacksmith.....	Lieutenant.
Peter Neisen.....	36	Germany	Barber	Pipeman.
*Chas. Hunstock.....	39	Germany	Teamster.....	Pipeman.
Thos. J. Croak.....	42	Ireland.....	Teamster.....	Driver.

*Disabled; on pension roll.

CHEMICAL ENGINE COMPANY No. 4.*Corner of Twenty-first Avenue North and Fourth Street.*

This apparatus was built by the Fire Extinguisher Manufacturing Company, Chicago, Ill.; has been in service two years; weight when ready for use, 3,700 pounds; is drawn by two horses. This engine has two iron tanks or generators jacketed with brass, which are tested to three hundred pounds hydrostatic pressure to the square inch. Carbonic acid gas is both the working and extinguishing agent.

Members.	Age.	Nativity.	Former Occupation.	Position.
H. W. B. Smith.....	39	United States.	Carpenter.....	Captain.
Louis H. Vogel.....	34	United States.	Cooper.....	Lieutenant.
Patrick O. Rielly....	32	Ireland.....	Clerk.....	Pipeman.
George Gould.....	27	United States.	Teamster.....	Driver.

CHEMICAL ENGINE COMPANP No. 5.*Seventeenth Avenue South between Twenty-fifth and Twenty-sixth Streets.*

This apparatus was built by the Fire Extinguisher Manufacturing Company, Chicago, Ill.; been in service two years; weight when ready for service 3,700 pounds; drawn by two horses. This engine has two iron tanks or generators jacketed with brass, which are tested to three hundred pounds hydrostatic pressure to the square inch. Carbonic acid gas is both the working and extinguishing agent.

Members.	Age.	Nativity.	Former Occupation.	Position.
Henry H. Thompson.	33	United States.	Cooper.....	Captain.
Oliver B. Stafford ...	37	United States.	Broommaker.....	Lieutenant.
Percy E. Smith	24	United States.	Flour packer.....	Pipeman.
James McCulloch....	37	United States.	Carpenter.....	Driver.

EXTRA WORK.

Besides attending to fire duties, the members of this department have worked extra, as follows:

Repairs to apparatus and repair shop work.....	2,709 days.
Repairs to engine houses.....	1,153 "
Fire alarm telegraph.....	213 "
Hauling manure, miscellaneous, etc.....	103 "
Total.....	4,258 "

Exhibit B.**STATEMENT OF EXPENDITURSS.**

Salaries.....	\$182,885.23
Property purchased.....	19,987.93
Fire alarm telegraph.	11,291.66
Forage.....	7,406.68
Fuel and lights.....	4,754.01
Repairs to buildings.....	4,205.28
Repairs to apparatus and equipments.....	3,071.45
Store room supplies.....	1,419.13
Horse shoeing.....	1,405.00
Laundry.....	736.99
Telephone rent.....	675.65
Scavenger	570.04
Freight and express.....	485.81
Printing and stationery.....	442.79
Ice, seasons of 1888 and 1889.....	394.00
Soft soap.....	376.93
Drugs.....	163.97
Repairs to harness.....	163.82
Material for new harness.....	88.91
Acid and soda for extinguishers.....	153.25

Total.....	\$240,678.53
Expenses from January 1, to March 1.....	37,836.45

Total expense ten months..... \$202,841.08

CR.

Nine horses sold, money turned over to general fund....	\$500.00
Collars, harness and weights.....	46.80
Fifty-eight acid carboys.....	52.20

Total..... \$599.00

Actual expenditures.....	\$202,242.08
Paid out of permanent improvement fund for lot corner James and Fifth avenue north.....	\$1,400.00
Plumbing and steam heat plant for Station P.....	973.46

Total..... \$2,373.46

Itemized Statements of Expenditures for Each Station, Year of 1889.

	FOR WHAT EXPENDED.							
	Station A.	Station B.	Station C.	Station D.	Station E.	Station F.	Station G.	Station H.
Forage.....	\$506.81	\$317.70	\$827.94	\$157.59	\$329.51	\$574.87	\$704.67	\$336.60
Lights.....	245.86	63.84	224.64	47.32	123.10	82.32	193.98	81.92
Laundry.....	77.62	41.01	73.93	23.82	36.71	72.51	74.99	46.81
Soft soap.....	40.89	13.20	38.32	18.38	30.08	32.27	17.30	24.89
Fuel.....	308.27	130.11	438.47	20.25	193.78	313.39	453.86	281.52
Horseshoeing.....	77.40	79.75	131.25	19.10	28.00	73.25	148.25	106.00
Ice.....	14.00	28.00	40.00	20.00	76.25	28.00	28.00	28.00
Scavenger.....						38.40		
Acid and soda.....	14.20		14.90		60.82		5.44	
Repairs to apparatus.....	15.61	8.70	61.95	19.12	15.75	57.03	13.69	12.70
Repairs to building.....	253.30	203.71	357.93	57.80	142.95	289.13	71.06	42.35
Property purchased.....	154.88	131.21	83.77	19.40	14.63	36.04	53.55	138.91
Total.....	\$1,798.84	\$1,017.23	\$2,396.20	\$402.98	\$1,062.58	\$1,577.21	\$1,744.69	\$1,519.70

	FOR WHAT EXPENDED.							
	Station I.	Station J.	Station K.	Station L.	Station M.	Station N.	Station O.	Station P.
Forage.....	\$541.72	\$452.03	\$375.39	\$406.71	\$302.38	\$212.71	\$480.83	\$153.57
Lights.....	37.78	28.75	101.88	85.85	28.45	32.70	37.35	20.30
Laundry.....	38.97	51.21	26.39	38.52	27.98	43.27	30.00	8.85
Soft soap.....	29.70	21.74	19.20	22.92	16.40	19.65	35.90	12.16
Fuel.....	188.43	282.72	329.07	485.44	200.60	272.61	206.27	240.21
Horseshoeing.....	81.25	118.50	56.50	73.35	35.00	94.75	106.25	15.20
Ice.....	28.00	20.00	20.00	28.00	20.00	28.00	28.00	
Scavenger.....		36.32	153.92	112.00	51.20	254.80	23.04	
Acid and soda.....		21.04				38.78	4.39	
Gasoline.....							51.68	
Repairs to apparatus.....	18.15	16.75	33.30	93.04	21.26	8.70	41.82	1.05
Repairs to building.....	630.13	400.52	327.77	132.73	17.53	14.36	18.43	36.93
Property purchased.....	7.31	73.21	177.45	49.57	184.32	59.96	8.90	263.22
Total.....	\$1,594.52	\$1,530.79	\$1,629.77	\$1,534.13	\$995.72	\$1,030.29	\$1,092.85	\$751.39

STOREROOM ACCOUNT.

Matches and soap.....	\$95.16
Waste.....	84.33
Lantern globes and lamp chimneys, wicks and burners.....	52.28
Cylinder and harness oil.....	92.15
Chamois and sponges.....	171.75
Bed linen.....	113.74
Feather dusters.....	18.00
Sash cord.....	47.79
Horse blankets.....	42.00
Brooms and mops.....	82.25
Respirators.....	12.00
Cuspidores.....	6.93
Lanterns.....	60.00
Curry combs and horse brushes.....	175.65
Tripoli and metal polish.....	88.32
Chairs.....	5.00
Bed springs and mattresses.....	33.00
Acid bottles and corks.....	24.00
Hames and collars.....	11.62
Axle Grease.....	13.50
Horse pails and 4-quart measures.....	7.50
Insect powder.....	4.50
Hay forks.....	5.25
Shovels.....	5.10
Bits, buckles and snaps.....	21.35
Play pipes and tips.....	46.34
Whips.....	30.87
Pulleys belleranks and gaskets.....	17.08
Expansion rings and rubber valves.....	16.60
Scales.....	16.00
Emery cloth, fork and axe handles, webbing and twine.....	6.88
Files and bitts.....	8.14
Tools.....	3.05
Total.....	\$1,419.13

REPAIR SHOP ACCOUNT.

Fuel.....	\$ 223.84
Lights.....	10.92
Oils.....	19.95
Material for use.....	2,507.98
Property Purchased.....	3,798.71
Total.....	\$6,561.40

GENERAL DEPARTMENT EXPENSES.

Salaries.....	\$182,885.23
Telephone rent.....	675.65
Freight and express.....	485.81
Printing and stationery.....	442.27
Horseshoeing.....	145.25
Carriages for inspection.....	36.00
Boiler inspection.....	66.00
Lumber.....	140.26
Repairs to apparatus.....	124.21
Property purchased.....	10,953.10
Total.....	\$195,953.78

VETERINARY DEPARTMENT.

Forage.....	\$728.03
Drugs.....	193.83
Horseshoeing.....	57.25
Pasturing.....	18.60
Repairs to apparatus.....	.50
Repairs to building.....	29.72
Property purchased.....	17.40
Total.....	\$1,045.63

FIRE ALARM TELEGRAPH.

Pipe.....	\$ 235.11
Poles.....	144.50
Wire.....	203.55
Hardware.....	47.35
Insulators and brackets.....	76.33
Pitch.....	160.98
Pay roll.....	715.43
Casting.....	61.92
Underground cable.....	7,777.95
Horseshoeing.....	21.25
Repairs to apparatus.....	4.59
Battery supplies.....	814.93
Property purchased.....	3,848.67
Total.....	\$14,112.56

Number of Blocks Run by Each Apparatus to Fires.

COMPANY.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Steamer No. 1..	70	92	45	112	98	49	80	62	85	140	64	134	1,031
3..	44	136	55	58	47	83	91	84	91	171	115	93	1,068
4..	100	201	92	122	104	50	131	46	131	158	70	93	1,299
5..	65	116	88	81	114	63	135	136	69	97	81	69	1,114
6..	31	93	36	123	35	14	121	44	57	85	86	78	803
7..	87	64	62	76	30	17	104	87	45	80	62	77	801
8..	39	80	74	76	52	42	34	14	69	53	131	70	734
9..	62	23	65	24	69	56	46	20	75	60	47	42	589
10..	113	117	67	93	79	87	146	55	58	181	75	54	1,125
11..	80	49	124	83	67	113	82	24	31	123	26	60	862
12..	.....	15	46	73	40	34	66	30	26	56	27	49	462
14..	33	25	41	32	30	11	37	.....	14	99	36	25	383
Hose No. 1..	108	83	45	140	141	51	88	64	98	195	92	134	1,239
2..	36	53	55	92	45	119	103	24	33	97	28	55	740
3..	80	183	109	124	74	113	161	150	106	203	181	139	1,623
4..	76	191	92	122	112	80	150	63	153	227	73	77	1,416
5..	111	168	109	127	184	100	168	164	90	127	95	113	1,556
6..	73	234	132	214	130	106	196	79	140	167	267	212	1,950
7..	89	111	73	196	119	30	108	92	45	101	115	77	1,156
8..	39	80	64	162	52	42	65	33	69	53	131	70	860
9..	62	23	65	24	95	72	85	20	93	91	47	42	719
10..	113	273	175	160	125	125	146	55	164	318	201	108	1,963
11..	40	85	137	112	108	120	83	37	77	142	38	90	1,069
12..	41	23	95	93	44	56	67	44	26	60	27	63	639
13..	62	72	44	123	39	136	96	106	159	76	84	98	1,095
14..	33	67	41	32	50	11	37	.....	14	99	36	25	455
15..	.....	.....	.....	33	18	36	30	27	.....	45	50	68	307
H. & L. No. 1..	70	155	96	130	59	4	176	73	82	180	151	133	1,309
2..	99	125	89	179	93	149	166	81	95	136	47	153	1,412
3..	111	128	86	245	184	121	158	173	139	110	150	97	1,702
4..	67	112	53	56	75	80	84	21	4	172	46	47	821
5..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	70	112
Supply No. 1..	81	275	119	175	122	113	213	141	104	209	155	149	1,956
Chem. No. 1..	94	178	104	127	95	73	175	117	119	244	162	155	1,643
2..	26	80	64	138	86	42	14	33	70	53	121	46	773
3..	63	51	128	109	107	126	158	45	33	130	27	91	1,068
4..	42	67	39	35	37	27	50	.....	14	107	36	25	479
5..	111	69	44	66	54	62	96	107	59	86	73	81	908
Fuel W. No. 1..	.....	.....	.....	15	.....	16	50	.....	.....	16	11	37	145
2..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	.....	25
3..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	.....	15

Chief Engineer..... 6,068 blocks, or 466 miles 10 blocks.
 First Assistant Engineer..... 4,868 " " 374 " 6 "
 Second Assistant Engineer..... 5,002 " or 384 " 10 "

Total..... 15,938 blocks, or 1,226 miles.
 Distance both ways..... 2,452 "

Hose Stretched.

COMPANY.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Hose No. 1....	2,050	3,550	1,050	3,200	2,150	1,650	4,250	4,000	4,000	5,700	2,200	3,900	37,700
2.....	400	650	900	1,600	550	1,050	1,750	900	250	2,450	650	1,000	12,150
3.....	1,300	5,000	1,350	2,100	700	1,950	1,050	2,650	4,650	2,650	1,400	1,650	26,450
4.....	1,450	5,250	400	1,650	1,400	1,500	3,400	250	3,550	2,500	1,550	2,100	25,000
5.....	1,100	2,300	700	2,750	2,600	3,400	3,700	3,250	2,000	3,400	1,100	2,600	27,900
6.....	2,200	3,850	1,700	3,050	1,000	1,150	3,900	1,150	800	2,350	2,800	3,750	26,700
7.....	950	750	650	2,950	1,750	1,550	1,350	2,550	1,250	2,650	2,250	1,300	19,950
8.....	250	1,000	900	3,850	1,150	850	600	450	850	2,400	3,100	1,050	16,450
9.....	800	.....	1,750	400	1,150	4,350	650	1,100	400	4,150	800	2,500	18,650
10.....	500	3,150	1,850	1,950	750	2,050	2,650	350	3,350	3,050	2,950	650	23,250
11.....	1,250	1,800	1,700	450	.....	3,400	750	1,600	2,300	2,200	900	2,700	19,050
12.....	1,350	850	2,050	1,550	300	1,850	1,250	1,800	800	2,950	800	2,100	17,650
13.....	.....	650	300	1,650	1,650	1,450	1,800	950	1,050	1,450	2,850	1,250	15,050
14.....	900	1,800	800	1,400	850	500	1,750	.....	.....	1,400	800	300	10,500
15.....	.....	.....	.....	1,600	.....	.....	1,650	950	.....	700	1,050	.....	5,950

RECAPITULATION.

January.....	14,500	August.....	21,950
February.....	30,600	September.....	25,250
March.....	16,100	October.....	40,000
April.....	30,150	November.....	25,200
May.....	16,000	December.....	26,850
June.....	26,700	.....Total.....	302,800
July.....	29,500		

Chemicals, Ladders and Rubber Covers.

MONTH.	LARGE CHEMICALS				SMALL CHEMICALS.				Gallons of Chemicals.	FEET OF LADDERS RAISED.								Covers—Supply Wagon No. 1.
	Chemical No. 1.	Chemical No. 2.	Chemical No. 3.	Chemical No. 4.	Chemical No. 5.	H. & L. No. 1.	H. & L. No. 2.	H. & L. No. 3.		H. & L. No. 4.	H. & L. No. 5.	Chemical No. 2.	Chemical No. 4.	Chemical No. 5.	Total.			
January ..	3	1	1	2	12	1	3	7	.....	657	49	297	102	121	569	.....	
February ..	17	1	1	1	3	24	2	8	.....	2,052	528	145	62	129	864	28	
March.....	5	1	1	1	1	9	2	.....	.....	717	328	128	92	87	661	.....	
April.....	5	2	2	3	5	10	10	.....	.....	1,077	28	.....	306	14	422	.....	
May.....	3	2	3	4	4	10	12	11	1	1,156	63	30	120	14	227	.....	
June.....	2	4	2	2	2	4	5	5	1	1,165	175	341	96	236	848	.....	
July.....	9	1	1	1	1	8	1	4	2	1,090	255	196	156	86	707	.....	
August.....	9	1	1	1	1	3	11	.....	.....	1,071	102	79	85	.....	332	.....	
September	11	1	1	1	1	8	8	.....	.....	1,216	592	203	98	14	921	15
October ..	9	6	4	1	1	13	5	11	4	1,521	276	99	296	84	755	5		
November ..	7	3	1	3	3	8	2	3	.....	912	215	130	389	75	926	.....	
December ..	9	1	3	2	1	9	6	6	2	1,214	479	531	74	231	1,392	5		
Totals..	89	22	16	20	29	108	47	55	13	13,848	3,090	2,179	1,876	1,091	9,624	53		

Hours Worked.

COMPANY.	January.	February.	March	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Steamer No. 1.	6:15	12:45	4:45	10:45	6:45	7:00	9:15	5:20	9:40	12:15	25:25	15:45	96:55
3.	4:00	19:30	5:15	6:40	4:00	9:05	9:05	8:20	11:20	14:20	20:30	13:30	105:35
4.	5:00	12:55	2:45	6:00	4:15	6:00	10:00	2:00	13:15	8:30	18:00	4:30	93:10
5.	4:25	6:40	4:40	5:25	6:35	4:10	8:55	6:45	4:55	5:20	11:40	5:20	74:50
6.	2:50	9:45	3:00	8:40	2:25	30	10:25	2:15	3:45	10:30	12:50	7:05	74:00
7.	5:15	2:50	3:15	6:45	2:55	2:30	6:45	5:55	4:10	8:30	10:10	5:05	64:05
8.	1:55	3:15	4:15	4:35	3:00	1:45	2:00	30	3:20	6:45	10:20	3:20	45:00
9.	2:20	35	4:25	2:25	2:05	8:15	2:20	2:15	3:35	8:05	7:35	6:45	50:40
10.	2:50	6:50	4:50	5:25	3:45	8:55	7:15	2:50	5:20	13:10	6:10	2:45	70:05
11.	3:10	2:35	4:30	2:25	2:10	9:30	3:45	1:55	2:05	10:10	17:20	7:00	70:25
12.	.....	40	2:10	3:55	1:50	2:30	3:25	3:05	2:05	9:50	6:00	9:05	44:35
14.	1:45	2:15	2:45	3:20	2:45	1:30	6:30	.....	30	5:45	3:15	2:05	32:25
Hose No. 1.	9:15	16:15	5:15	15:20	10:00	9:00	23:15	8:20	11:30	17:15	23:35	18:00	167:00
2.	1:55	1:75	3:40	4:35	3:05	4:30	9:35	2:35	1:40	9:55	6:30	5:50	56:05
3.	5:25	19:45	9:10	8:15	4:15	11:20	8:05	8:05	15:00	15:45	28:25	10:20	144:30
4.	4:05	10:40	3:05	6:30	5:15	8:30	12:00	2:45	16:00	11:45	18:15	5:10	104:00
5.	7:40	10:30	5:35	7:10	7:25	8:45	16:55	9:00	7:20	10:35	11:45	12:35	115:15
6.	4:10	14:50	6:50	10:55	6:10	5:15	12:30	2:55	6:30	13:00	32:20	17:25	134:00
7.	4:35	4:20	3:40	19:50	5:45	3:05	6:35	5:55	4:35	10:15	12:05	6:20	88:00
8.	1:55	3:15	4:15	12:10	3:15	2:05	2:10	1:30	3:10	9:35	10:45	3:20	57:25
9.	2:20	35	6:10	2:25	2:50	15:00	2:20	2:15	4:30	14:15	7:55	9:35	64:10
10.	3:55	11:15	8:20	7:50	4:55	10:05	7:15	2:15	8:55	21:20	32:25	5:40	124:00
11.	4:00	6:10	5:35	2:25	3:55	14:40	7:05	2:40	3:35	10:15	14:15	11:30	86:05
12.	5:20	1:20	4:50	3:55	3:20	5:45	4:00	2:35	2:85	13:35	16:00	11:10	75:25
13.	3:45	4:20	3:15	17:15	2:20	6:05	7:00	4:30	6:50	9:10	8:10	5:40	78:20
14.	2:15	2:15	2:45	4:05	4:00	1:30	7:30	.....	30	5:30	8:15	2:05	40:40
15.	.....	.....	.....	4:05	1:35	2:40	2:05	3:10	.....	6:50	9:40	4:00	34:05
H. & L. No. 1.	4:10	20:05	8:10	10:20	5:00	6:05	16:10	5:00	15:05	16:35	18:50	16:55	136:25
2.	7:46	5:10	7:30	7:15	4:45	21:15	4:40	2:35	9:45	13:25	20:45	14:50	119:50
3.	7:35	8:00	5:40	21:30	9:30	6:00	19:00	10:20	8:50	13:10	21:20	7:55	134:50
4.	4:30	7:30	2:30	4:30	4:10	8:15	8:30	1:30	1:15	9:15	6:15	5:10	63:20
5.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4:00	3:45	7:45
Supply No. 1.	5:30	26:05	10:50	14:30	7:55	11:20	16:40	9:10	17:30	20:15	19:45	17:35	176:40
Chem. No. 1.	7:05	24:00	5:15	9:35	7:05	6:30	14:45	11:10	14:45	17:20	13:35	16:50	147:55
2.	40	3:30	4:15	10:30	5:15	2:50	1:15	2:00	3:15	6:20	10:30	3:45	54:05
3.	7:30	1:40	4:55	3:10	6:00	8:50	7:05	2:40	5:00	10:10	12:30	2:30	71:20
4.	3:10	3:45	3:00	5:05	4:05	1:25	2:15	.....	35	4:15	3:30	2:40	33:15
5.	6:45	4:15	4:25	8:25	3:25	3:55	7:00	5:15	5:15	6:40	3:00	5:05	63:25
Fuel W. No. 1.	.....	.....	.....	1:15	.....	2:45	.....	.....	.....	5:30	20:00	2:00	31:30
2.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18:00	.....	18:00
3.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12:00	.....	12:00

Monthly Summary of Work Done.

MONTH.	Number of alarms.	Blocks run.	Hours worked.	Feet of ladders.	Hose laid.	CHEMICALS.			Covers spread.
						Large.	Small.	Gallons.	
January.....	35	2,448	252:45	569	14,560	8	11	657	.....
February.....	48	3,904	292:20	864	30,600	23	36	2,052	28
March.....	40	2,945	179:20	661	16,100	9	11	717	.....
April.....	45	3,984	288:40	422	30,150	15	11	1,077	.....
May.....	35	2,957	166:25	227	16,000	14	28	1,156	.....
June.....	33	2,629	247:45	848	26,700	12	15	1,165	.....
July.....	51	3,953	302:35	707	29,500	15	15	1,090	.....
August.....	33	2,351	154:20	332	21,950	13	14	1,071	.....
September.....	37	2,737	227:00	921	25,250	15	17	1,216	15
October.....	52	4,907	415:15	755	40,000	22	33	1,521	5
November.....	32	3,369	570:40	926	25,200	14	16	912	.....
December.....	43	3,337	311:25	1,392	26,850	16	24	1,214	5
Total.....	484	39,567	3,408:30	8,624	302,800	176	230	13,841	53

*Exhibit D.**Causes of Fires.*

Accidental.....	6	Lens left in sun.....	1
Burning rubbish.....	4	Marsh prairie and woods a fire.....	13
Carelessness.....	60	Overheated bearing.....	3
Children with matches.....	23	" dry kiln.....	1
Chimney fires.....	26	" fireplace.....	2
Cigar or cigarette stubs.....	7	" furnace.....	3
Defective chimneys.....	18	" range.....	1
" fire-place.....	1	" smokehouse.....	2
" flue.....	11	" stove.....	4
" stove.....	1	Rekindled.....	9
" stovepipe.....	7	Salamander.....	3
Electric light wires.....	4	Rats with matches.....	2
Explosion of asphaltum.....	1	Slaking of lime.....	1
" gasoline.....	8	Smoke mistaken for fire.....	4
" kerosene lamp.....	20	Sparks from chimney.....	13
" " stove.....	4	" furnace.....	10
" " boiler.....	1	" locomotive.....	13
" " lantern.....	2	" smokestack.....	15
" " gas in furnace.....	1	" stove.....	1
" " headlight.....	1	" stovepipe.....	2
False alarms.....	18	" smokehouse.....	1
Fireworks.....	8	Stovepipe falling.....	1
Glandered barn fired by board of health.....	1	Steam mistaken for smoke.....	2
Gasoline stove.....	5	Supposed incendiary.....	5
Incendiary.....	36	Spontaneous combustion.....	25
Lamp upset.....	7	Unknown.....	57
Lamp falling.....	1	Trying out lard.....	1
Lantern upset.....	2		
Lightning.....	5	Total.....	484

Buildings, how Occupied.

Dwellings.....	144	Trees.....	2
Barns.....	44	Refreshment stands.....	1
Boarding houses.....	17	Churches.....	1
Tenements.....	15	Engine rooms.....	1
Sheds.....	15	Fertilizer factory.....	1
Prairie marsh woods.....	14	Cornice.....	1
Groceries.....	11	Hat.....	1
Store and tenement.....	10	Fence.....	1
Saloons.....	10	Bottling.....	1
Hotels.....	9	City hall.....	1
Foundries.....	7	Public hall.....	1
Restaurant.....	7	Pillsbury hall.....	1
Stores and dwellings.....	7	Hospital.....	1
" offices.....	6	Ice house.....	1
Meat markets.....	5	Hot.....	1
Stores.....	5	Sawdust house.....	1
" second-hand.....	5	School.....	1
Lumber, cedar post and woodpiles.....	5	Play.....	1
Sash and door mills.....	4	Harvester works.....	1
Smoke houses.....	4	Saw mills.....	1
Warehouses.....	4	Paper.....	1
Offices.....	4	Cedar block mills.....	1
Barber shops.....	4	Locomotive engine.....	1
Shoestores.....	4	Livery stable.....	1
Confectionery stores.....	4	Street car.....	1
Lumber and woodyards.....	4	Harness shop.....	1
Manure piles.....	4	Furniture.....	1
Breweries.....	3	Machine.....	1
Outhouses.....	3	Tin.....	1
Laundries.....	3	Furniture store.....	1
Planing mills.....	3	Drug.....	1
Clothing stores.....	3	Millinery.....	1
Cooper shops.....	3	Hardware.....	1
Dry kilns.....	3	Dry goods.....	1
Bakeries.....	2	Feed.....	1
Candy factory.....	2	Jewelry.....	1
Furniture.....	2	Commission.....	1
" ".....	2	Photograph gallery.....	1
Boiler.....	2	Telegraph pole.....	1
Grain elevators.....	2	Carpet on line.....	1
Railroad depots.....	2	Junk shop.....	1
Haystacks.....	2	Crematory.....	1
Storehouses.....	2	Wooden pier.....	1
Switch houses.....	2	Ash pit.....	1
Printing offices.....	2		

	No loss.	Slight.	Considerable.	Total loss.	Total.
1 story brick	5	3			8
2 " "	5	3	6		14
3 " "	10	8	3		21
4 " "	3	5	1		9
5 " "	2	2			4
6 " "	1				1
7 " "					
8 " "	2	1	1		4
9 " "	1	1			2
2 stone	1	1			2
3 " "	2		3		5
4 " "		1			1
5 " "	3				3
1 frame	25	15	9		49
1½ " "	14	15	15	1	45
2 " "	74	58	36	6	174
2½ " "	5	2	1		8
3 " "	13	2	4		19
2 veneer	2	1	1		4
2½ " "					3
3 " "	1	2			
Marsh, etc	18				18
Telegraph pole	1				1
Wood and lumber piles	5	5	1		11
R. R. cars	2				2
Sheds	10	5			15
Fence					
Chimney fires	15				15
Rekindled					
Rubbish	13				13
Manure pile	4				4
Sidewalk	1				1
False alarms	17				17
Trees	2				2
Sign board	1				1
Carpet on line		1			1
Haystacks	1	1			2
Locomotive	1				1
R. R. platform		1			1
Coal pile		1			1
Tar kettle	1				1
Wooden pier	1				1
Awning		1			1
Total	261	135	81	7	484

Company Hitching.

COMPANY.	Time to hitch apparatus by company.	Time to hitch apparatus, men & horses on floor.	Time to hitch apparatus, men in bed.	Distance from stall traveled by horses.	Rem'ks.
Engine Co. No. 1.	14 seconds	5 $\frac{1}{2}$ seconds.	19 seconds.	47 feet.	3 horses
" " 3.	15 "	7 "	14 $\frac{3}{4}$ "	31 "	3 "
" " 4.	13 $\frac{3}{4}$ "	4 "	13 "	38 "	4 "
" " 5.	18 "	9 $\frac{1}{2}$ "	21 "	37 "	3 "
" " 6.	14 "	5 "	11 $\frac{1}{2}$ "	49 "	4 "
" " 7.	13 "	4 $\frac{1}{2}$ "	15 "	50 "	4 "
" " 8.	15 "	7 $\frac{3}{4}$ "	15 "	40 "	4 "
" " 9.	8 "	5 "	16 "	37 "	2 "
" " 10.	19 "	7 $\frac{1}{2}$ "	20 "	43 "	4 "
" " 11.	19 "	6 "	28 "	36 "	4 "
" " 14.	19 $\frac{3}{4}$ "	4 "	14 $\frac{1}{2}$ "	43 $\frac{1}{2}$ "	3 "
Hose " 1.	9 "	21 $\frac{1}{2}$ "	10 "	47 "	2 "
" " 2.	8 "	31 $\frac{1}{4}$ "	11 "	41 "	2 "
" " 3.	5 "	21 $\frac{1}{2}$ "	9 "	32 "	2 "
" " 4.	6 "	3 "	13 "	63 "	2 "
" " 5.	10 "	41 $\frac{1}{2}$ "	10 "	52 "	2 "
" " 6.	9 "	41 $\frac{1}{2}$ "	8 "	65 "	2 "
" " 7.	10 "	51 $\frac{1}{2}$ "	10 "	53 "	2 "
" " 8.	8 "	41 $\frac{1}{2}$ "	No time.....	65 "	2 "
" " 9.	12 $\frac{1}{2}$ "	3 "	8 seconds.	53 "	2 "
" " 10.	8 "	3 "	10 "	34 "	2 "
" " 11.	10 "	33 $\frac{1}{4}$ "	10 "	35 "	2 "
" " 12.	9 "	6 "	No time.....	30 "	2 "
" " 13.	11 "	41 $\frac{1}{2}$ "	20 seconds.	30 "	2 "
" " 14.	13 "	6 "	10 "	31 "	2 "
H. & L " 1.	10 "	6 "	15 "	61 $\frac{3}{4}$ "	4 "
" " 2.	10 "	41 $\frac{1}{2}$ "	9 "	49 "	2 "
" " 3.	15 "	91 $\frac{1}{2}$ "	21 "	54 "	4 "
" " 4.	6 "	3 "	13 $\frac{3}{4}$ "	56 "	2 "
Chemical " 1.	10 "	43 $\frac{1}{4}$ "	11 "	66 "	2 "
" " 2.	No time.....	3 "	10 "	62 "	2 "
" " 3.	15 seconds	5 "	18 "	27 "	2 "
" " 4.	8 "	7 "	8 "	27 "	2 "
" " 5.	13 $\frac{1}{4}$ "	41 $\frac{1}{4}$ "	11 "	31 "	2 "
Supply W " 1.	5 "	23 $\frac{1}{4}$ "	9 "	31 $\frac{1}{4}$ "	2 "

JANUARY, 1889.

Day.	Time of day.	Location.	Class of building.	Owner.	Occupant.	Use.	Cause.	Total loss.	Total insurance.
1	4:08 a m	750 18½ av NE.	2 story frame.	M. M. Brown.	Same.	Dwelling.	Defective chimney.	\$310.82	\$1,900.00
1	8:19 a m	1st st and 14th av N.	3 "	M. P. Brown.	"	Warehouse.	Spontaneous comb'n.	2,650.00	3,400.00
1	10:45 a m	1st st and 14th av N.	3 "	"	"	"	Re-kindled.		
1	11:30 a m	1,900 1st st S.	2 "	"	"	"	Stovepipe fell.		
2	8:05 a m	20th av S and 31st st.	2 frame.	"	"	"	Unknown.		
2	1:21 a m	265 Washington av N.	1 brick.	"	S. E. Hart & Co.	Store.	Incendiary.	45.00	2,000.00
3	11:43 p m	911 8th av S.	1 frame.	W. H. Eustis.	Kirk & J.	Shop.	Accidental.	500.00	500.00
4	2:01 a m	4th st and 11th av SE.	2 "	"	"	Dwelling.	Lamp upset.		
4	6:55 p m	1,311 Clinton av.	2 "	"	N. A. Shaw.	Shed.	Carelessness.		
6	10:00 p m	2,745 S Aldrich av.	2½ "	T. P. Healy.	Unoccupied.	Dwelling.	Salamander.		
6	5:30 p m	3,010 Hennepin av.	2 "	Geo. Higgins.	"	"	Lamp upset.	1,000.00	
7	7:55 p m	301 S 7th st.	2 brick.	L. F. Menage.	F. E. Brewster.	"	Chimney fire.	20.00	3,500.00
9	10:35 p m	527 Knox av N.	2 frame.	J. W. Kelly.	Same.	Stores.	Soot from chimney.	10.00	1,000.00
10	9:45 p m	236-238 Cedar av.	2 "	"	"	Harness shop.	Defective chimney.	150.00	
12	3:10 a m	918 N Lyndale av.	1 brick.	"	Wm. Phillips.	"	Overheated stove.	150.00	300.00
15	6:36 a m	225 Washington av N.	1 brick.	"	"	"	Carelessness.		
15	4:43 p m	625 Nicollet av.	3 "	A. Scott.	A. Dalton.	Store.	Chimney fire.	50.00	300.00
16	8:35 p m	317 5th st NE.	1 frame.	"	"	B'rding house.	Chimney fire.		
17	6:45 p m	524 N 3d st.	2½ "	— Page.	F. Green.	Dwelling.	Carelessness.	25.00	
18	10:15 a m	1,592 Western av.	2 "	"	"	Restaurant.	Incendiary.		
18	7:13 p m	226 Hennepin av.	2 "	Methodist society.	"	Church.	Defective flue.		
20	3:00 p m	2,810 Grand av.	2 "	Wynum & Smith.	"	Dwelling.	Defective fire-place.	10.00	700.00
21	10:35 a m	2,728 13th av S.	2 "	"	L. M. Ford.	"	Unknown.	15.00	
21	3:42 p m	1,106 3d av S.	2 "	E. T. Fletcher.	E. A. Kahn.	"	"	15.00	
21	8:50 p m	927 Central av.	2 "	Nelson & Johnson.	Mrs. Landry.	"	Defective stovepipe.	320.00	600.00
23	9:25 p m	30 N 8th st.	2 frame.	"	"	"	Lamp upset.		
24	4:32 a m	2,303 Park av.	3 brick.	F. D. Ford.	Same.	"	Spontaneous comb'n	200.00	15,000.00
26	12:34 p m	H's n st & Bdwy NE.	2 frame.	Nelson Tenney & Co.	"	Dry kiln.	Overheating.	300.00	
28	4:57 p m	915 Minnehaha av.	1½ "	A. P. Nelson.	Same.	Dwelling.	Carelessness.	5.00	
28	5:15 p m	Mrsl st & 13th av NE.	2 "	Jno. Orth Brew'g Co.	"	Brewery.	False alarm.		
28	6:25 p m	8th st and 24th av S.	2 "	"	"	Dwelling.	Chimney fire.		
30	7:20 a m	1,010 Washington av S.	1½ "	"	Mrs. Day.	"	Defective chimney.		
30	11:52 a m	304 S 5th st.	1½ "	"	"	"	Fall of stovepipe.		
30	10:20 p m	826 S 8th st.	4 brick.	L. F. Menage.	"	Tenement.	Matches.		

FEBRUARY, 1889.

1	2:10 a m	245 1st av S.	3 brick	City of Minneapolis.	Saloon.	Spontaneous comb'n			
1	3:25 p m	Univ'ity & 1st av SE.	3 stone.	"	School.	Spark from chimney			
1	5:58 a m	2614 14th av S.	3 "	S. A. Stevenson.	Dwelling.	Chimney fire.			
4	12:40 a m	192 Wash. av S.	3 brick.	Swenson Bros.	Saloon.	Lamp explosion.			
4	11:55 a m	1922 7th st.	3 "	"	Dwelling.	Chimney fire.			
5	6:48 a m	212 Colfax av N.	1 frame.	Joe Schuster.	Hot house.	Over-heated furnace	\$125.00		
5	10:10 a m	Wash. st & 7th av NE.	"	"	Dwelling.	Spontaneous comb'n			

FEBRUARY—Continued.

Day.	Time of day.	Location.	Class of building.	Owner.	Occupant.	Use.	Cause.	Total loss.	Total insurance.
5	12:55 p m	424 3d av S.	1 frame	Peter Rouen.	L. Gries.	Dwelling	Steam mist kn for fire		
5	12:56 p m	920 N 5th st.	2 "	A. Hunter.	J. W. Field.	Store and dwlg	Rendering lard	\$2.50	
5	6:35 p m	209 Nicollet av	4 brick	A. Hunter.	E. Johnson.	Store	Unknown	4,500.00	\$34,000.00
6	9:00 p m	2206 N 2d st.	1 1/2 frame.	S. C. Gale & Co.	L. Hale.	Barn	Incendary	29.00	250.00
7	10:35 a m	426 1st av N.	3 frame.			Tenement	Over-heated furnace	2.00	
7	8:20 p m	701 S 8th st.	3 brick			Restaurant.	False alarm.		
8	2:50 a m	200 Hennepin av.	3 brick		Taylor.		Carelessness.		
9	9:30 a m	1511 S 4th st.	2 frame.	A. R. Camp.	J. Treat.	Dwelling	Chimney fire.		
9	8:55 p m	829 S 6th st.	2 frame.		Boys	Hospital.	Carelessness.	5.00	
11	11:15 p m	1628 SE 6th st.	1 "			Dwelling	Boys with matches.		
11	12:15 p m	710 8th av N.	1 1/2 "			Playhouse.	Tramp incendiary.		
11	11:08 p m	Em' sn bet. 687 avs N.	1 "			Shanty	Chimney fire.		
11	1:05 p m	2121 10th av S.	2 brick	Baker.	T. W. Esterly	Saloon	Incendary	30.00	3,000.00
12	8:20 p m	117 Nicollet av.	2 brick	Security bank.	H. Shapiro.	Store	"	1,500.00	
12	9:24 p m	209 Wash. av N.	2 "	"	W. A. Alexander.	Warehouse	"	2,000.00	
12		209 Wash. av N.	2 "	"	S. Dobrin.	Store	"	1,700.00	
12	11:55 p m	117 Nicollet av.	2 frame.	Baker.	T. W. Esterly	Saloon	"	45.00	
13	10:32 p m	20 Wash. av S.	4 brick	A. H. Knowles.	Leach Bros.	Restaurant	Carelessness	25.00	3,000.00
13	11:30 p m	117 Nicollet av.	2 frame.	Baker.	T. W. Esterly	Saloon	Incendary	8.00	600.00
14	11:35 p m	739 10th av NE.	1 frame.	John Kaiser.	Same.	Woodshed	Unknown.	25.00	
15	6:00 p m	Main st and 2d av SE	3 stone	Lockwood.	Upton & Co.	Foundry	False mercantile.	15.00	400.00
16	12:50 p m	2835 Fort place	2 frame.	A. A. Mead.	Same.	Dwelling	Unknown.	65.00	500.00
16	7:50 p m	3200 S James av.	2 "	M. S. Jackson.	C. L. Lack.	"	"	175.00	500.00
16	9:40 p m	314 S 6th st.	5 1/2 "	"	Same.	"	Chimney fire.		
19	8:05 p m	129 Wash. av S.	2 "	Mrs. E. H. Thompson.	Anderson.	Photog'h gal'ry	Unknown.		
20	2:10 am	127 1/2 "	2 "	J. C. Higgins.	Same.	Shoe store	"	8,500.00	16,100.00
20		127 "	2 "	"	Chas. Scheffer.	Grocery.	"		
20		125 "	2 "	"	T. Stafford.	Fruit store.	"		
20	9:10 a m	324-326 2d av S.	3 "	Welsner.	Knoblauch Bros.	Shoe store.	Defective flue.	35.00	2,000.00
20	12:35 p m	113 N 1st st.	3 "	H. H. Gierston.	Various.	Shops, etc	Carelessness		
20		607-609 Wash. av S.	3 frame.	Parkins estate.	F. D. Norenburg.	Store and tene.	Defective chimney	450.00	3,000.00
20	12:53 pm	"	"	"	F. Dipple.	"	"		
20		"	"	Robert Battles	Burdick & Eames	"	"		
21	4:33 p m	2426 27th av S.	2 "	"	A. Ecklund.	Dwelling	"	200.00	
21	8:52 p m	815 5th av N.	2 "	H. L. Hubbard.	Chas. Rice.	"	Chimney fire.	Steamer N. o. 4 upset	0.4 upset
22	12:40 p m	206 E 16th st.	2 "	"	"	"	Spark from chimney	5.00	1,000.00
22	9:50 p m	1414 Clinton av.	2 "	"	"	"	Chimney fire.		
23	10:01 a m	27 N 2d st.	2 "	M. T. Wells.	J. C. Hairtag.	"	Defective chimney	175.00	200.00
23	2:30 p m	27 N 10th st.	2 "	M. Byrnes.	A. W. Aldrich.	"	"	700.50	4,000.00
23	7:00 p m	1321 5th av S.	3 brick	— Cary.	A. W. Loomis.	Board'g house.	Carelessness		10,000.00
23	10:40 p m	243 1st av S.	2 "	"	Nelson & McLean.	Tailor shop.	Incendary	15.00	2,300.00
24	9:10 p m	1524 E Franklin av.	2 frame.	"	Thos. Lawler.	Grocery.	"		

APRIL, 1889.

Day.	Time of day.	Location.	Class of building.	Owner.	Occupant.	Use.	Cause.	Total loss.	Total insurance.
1	5:08 p m	213 15th av N.	1 frame.	Frazier & Shepard.	Same.	Sawdust house.	Chimney fire.		
1	10:28 p m	5th st and 5th av N.	2	Minneapolis Street	Railway Co.	St. car barn.	Sparks.	\$5,000.00	\$10,000.00
2	1:45 a m	Cor. 7th km N. Chicago	2	P. J. Clementson	Various	Dwelling	Defective flue.	55.00	2,000.00
2	10:25 a m	1804 17th av N.	2						
4	10:18 p m	10th av S bet 30th and 32d sts.	2		Unoccupied.		Incendary.		
5	1:40 a m	1908 2d st N.	1 1/2	Carlson & Haystack.		Barn.	Unknown.	420.00	350.00
6	2:28 p m	4th st and 8th av SE.	Grass fire.				Carelessness.		
6	6:13 p m	2425 1st av S.	2		J. C. Napp.	Dwelling.	Overheated fireplace.	25.00	3,000.00
6	6:36 p m	Penn and 26th av S.	2	Pat Reilly	Unoccupied.		Incendary.	2,000.00	
6	7:13 p m	Piercest & 25th av NE	2			Grocery.	Rubbish fire.		
6	9:55 p m	27 S 1st st.	2				Defective chimney.		
6	11:47 p m	733 S 10th st.	2			Meat Market.	Lamp upset.		
8	9:55 p m	L'ndale av S M & M ry	1	M. E. Storms	Same	Dwelling.	Hot bearing.		
9	8:55 a m	200 4th st SE.	1	Heens	J. C. Fay.	Dwelling.	Gasoline explosion.		
10	11:04 p m	Nicollet av and 2d st.	4 stone.	J. W. Pence.	W. M. Morgan.	Barber shop.	Spontaneous comb.	50.00	8,000.00
11	8:12 p m	Nic. av and Wash.	4	F. S. Gilson & Co.	H. L. Rockfield.	Hotel.	Spark from furnace.		
12	2:32 a m	2004 N 2d st.	1 1/2	W. H. Adamson	Same	Barn, etc.	Supported incendiary.	1,000.00	1,874.00
12	8:05 p m	2524 17th av S.	1	Eagan		Barn.	Lantern upset.	250.00	175.00
13	10:17 a m	1017 14th av SE.	2			Dwelling.	Boys with matches.	10.00	
13	11:37 a m	West h & L'keside av	2	D. M. Gilmore Fur-	niture Co.	Factory.	Boiler kicked.		
13	7:05 p m	123 W Lake st.	1	T. M. Tibbetts.	Same	Shed	Burning rubbish.		
13	4:26 p m	Broadway & 4th st NE	2			Meat Market.	Carelessness.	200.00	
15	11:35 a m	5th st & 27th av NE.	1	St. P. M. & M. ry	Same		Spark from motive		
15	5:06 p m	2111 Minnehaha av.	1	Ankeny.		Shed	Ashes.	15.00	
16	11:54 p m	119 S 1st st.	1		S. W. Dickinson.	Signboard.	Lighting		
16	11:50 p m	Henn. & Wash. avs.	1			Boiler room.	From furnace.	35.00	10,000.00
17	6:36 p m	21-23 4th st S.	1			Laundry	Brush fire.	2,000.00	10,000.00
18	11:10 p m	915-917 Wash. av S.	2	S. R. Sikes & Co.	Same et al.	Ice house.	Defective chimney.	50.00	
20	5:25 p m	Knox av & W 36th st.	1	L. F. Menager.	Unoccupied.	Dwelling.	Defective flue.	50.00	1,000.00
21	8:07 a m	1616 California st NE.	2	Mrs. Ohlmsheit.	Same		Spontaneous comb.		
22	1:55 a m	2001 Lindley av.	2	W. H. Bailey	S. C. Tibbetts	Office.	Sm ke mistkn for fire	65.00	4,000.00
22	1:55 a m	18-20 S 6th st.	1				Spark from ht-air pipe		
22	1:45 a m	251 Nicollet av.	3			Mil.	Lamp upset.	3.00	
22	5:40 p m	1608 Monroe st NE.	3			Store, etc.	Incendary.		
22	6:25 p m	220 1/2 Cedar av.	3				Prairie fire.		
22	6:55 p m	109 Wash. av S.	2						
22	8:02 p m	Pleasant av & 42d st.	2	Lundquist & Lyon.		Office.	Countryman trying	45.00	125,000.00
24	8:43 p m	4th st and 1st av S.	3	Mpls Tribune Co.	Min'apolis Journal		Hot ashes.	to m'l let r	in bx 13.
24	1:35 p m	Wash. and 2d avs S.	1			Barn	Sm ke mistkn for fire	5.00	
28	1:48 a m	1900 Portland av.	1 1/2	Thos. Saeger.		Stores, etc.	Boys with cigarettes		
28	11:45 p m	251 Hennepin av.	3			Barn	Boys with matches.		
30	12:05 p m	2901 S 9th st.	3			Red-hot stand.	Boiler explosion.		
30	6:00 p m	Rear 17 N 2d st.	1			Offices, etc.			
30	6:35 p m	City Hall.	5	City of Minneapolis.					

MAY, 1889.

1	11:35 p m	7th st and 9th av S	E 2 frame	Leon Lane.	Same.	Dwelling.	Mice with matches.	\$40.00
2	9:24 p m	3d st and 3d av N	Wood-pile	W. W. Huntington.	Various	Woodpile	Cigar stub.	30.00
3	6:57 a m	16 and 18 N 4th st	5 brick.	W. W. Huntington.	Various	Offices	Sparks from furnace	\$105,000.00
3	9:43 a m	417-449 Cedar av	Manure pile	Day & Sons.	Same.	Cigar stub.	Sparks from stack.	
3	10:35 a m	1012 S 5th st	Carpet on line	St. Barnabas.	Same.	Sawmill.	Overheated bearing.	
3	2:45 p m	24th av N and river	1 frame	Jos. Turnbull.	Hospital.	Shed	Hot ashes	5.00
4	9:51 a m	6th st and 9th av S	1 " "	Wm. Frankle.	Boiler works	Boiler works	Unknown	400.00
4	7:10 p m	1st st and 19th av S	1 1/2 " "	Jno. G. Cricht.	Same.	Barn	Boys with matches.	100.00
4	8:20 p m	22d 3d st N E	1 " "	Jno. G. Cricht.	"	Shed	Carelessness	3,000.00
4	8:20 p m	22d N Grand av	1 " "	Mrs. O'Brien	"	Dwelling	Lamp explosion	75.00
4	8:35 p m	s Holden st	2 1/2 " "	Germania Brewing.	Company	Brewery	Spout comb	35,000.00
4	11:57 p m	Western & Zenith avs	Brick	H. A. Wilson, agent.	C. C. Parlee	Dwelling	Defective flue.	
5	5:05 a m	301 13th av S E	2 frame	O. Shepley	Horkeson Bros.	Dwelling	Stovepipe thro' floor.	10.00
6	5:05 a m	301 13th av S E	2 frame	Mrs. Flaherty	Arlington hotel	Bdg. house	Defective flu.	
7	2:40 a m	17 N 2d st	2 1/2 Veneer	Mrs. Wilson	Swanson	Paint shop.	Sparks fr'm chimney	6,000.00
7	5:15 p m	30 Bank st and 3d av S E	2 frame	Breck & Co.	Same.	Dwelling	Reflection of bonfire	400.00
11	12:37 a m	323 Johnston st N E	1 1/2 frame	Chas. Ewald.	G. F. Hunt.	Grocery	Lamp explosion	5.00
13	7:20 p m	297 Franklin av E	2 " "	Crown Iron Works.	Same.	Factory	Manure pile.	
14	10:30 a m	218 N 2d st	3 brick.	Chas. Ewald.	Same.	Pattern shop.	Carelessness	
14	8:41 p m	1105 N Dupont	1 frame.					25.00
15	10:20 p m	10th st & 2d av S E	1 " "					
18	10:13 a m	1500 E Franklin av	3 Veneer					
20	9:36 a m	3031 Balsdell av	Manure pile					
21	9:01 p m	411 Sixth av S	Straw pile.					
22	12:53 p m	127-129 S 1st st	2 brick					
22	11:36 a m	205 Washington av S	3 " "	A. E. Ames.	Rugg, Fuller & Co.	Store	Manure pile.	8.00
23	6:40 p m	654 Ontario st S E	1 frame	T. H. Hastings.	C. A. Merrill	Lamp explosion	Spark from chimney	350.00
23	1:10 a m	Sibley st & 9th av N E	Sawdust bank	N. M. Vanstrum	Same.	Unknown	Unknown	15.00
27	2:00 a m	130 E 34th st	1 1/2 frame.	J. W. Christinger	Same.	Spark from stack.	Spark from stack.	650.00
27	12:30 p m	1925 Washington av S	1 " "	Jno. Laughlin.	Miss E. G. Casey	Lightning	Lamp falling	*2,000.00
29	1:59 p m	11st av S	2 " "		Same.	Dwelling	Gasoline stove	100.00
30	9:37 a m	2031 24th av S	1 1/2 " "	Jno. Hope.	Owatonna hotel.	Dwelling	Spark locomotive.	500.00

JUNE, 1889.

1	1:45 a m	118-120 Wash. av N	3 stone.	Jno. Hope.	Paris Murton Co.	Factory	From boiler.	\$14,000.00
1	10:03 a m	False alarm, box acc'd	3 stone.	while working with pole.	Unoccupied	Tenement	Carelessness.	\$37,200.00
1	11:12 a m	2 Grove st (N. E. land)	3 stone.	W. H. Eastman	Same.	Dwelling	Gasoline explosion.	300.00
1	11:30 a m	3301 15th av S	2 frame	C. H. Merritt	Same.	Barn	Boys with matches.	1,000.00
1	4:57 p m	3158 2d av S	1 1/2 frame.	C. H. Rowe	"	Unknown	Unknown	900.00
4	11:55 p m	400 University av SE	1 1/2 " "	D. B. Rollings	"	Dwelling	Carelessness.	400.00
5	7:30 p m	318 Monroe st NE	2 " "	H. O'Shea	"	"	Sparks from locomot	5.00
6	9:50 a m	1498-1500 Western av	2 " "	C. Johnson et al.	"	"	Carelessness.	500.00
9	2:12 p m	422 Bryant av N	2 " "	J. Johnson et al.	"	"	Carelessness.	25.00
10	1:55 p m	6 Central av	2 " "	Geo. Harper.	Same	"	Spont. combustion.	1,800.00

*One cow burnt.

JUNE—Continued.

Day.	Time of day.	Location.	Class of building.	Owner.	Occupant.	Use.	Cause.	Total loss.	Total insurance.
12	8:50 a m	1000 11th av N.	1 frame.	Chas. Atwine.	Same.	Smoke house.	Overheating.	\$10.00	
12	10:25 a m	2d st and 9th av SE.	"	N. W. Star Oil Co.	"	Stable.	Unknown.	650.00	
12	8:04 p m	2d st and 9th av SE.	"	N. W. Star Oil Co.	"	"	Rekindled.		
13	8:15 a m	2d st and 9th av SE.	"	Plymouth Clothing	House	Store.	Rekindled.		
13	8:02 p m	3d st and Nicollet av	3 brick.	N. W. Star Oil Co.	House	Stable.	Spont. combustion.		
14	5:45 p m	2d st and 9th av SE.	2 frame.	J. Martin.	Unoccupied	Barn.	Rekindled.	2.00	
14	7:55 p m	247 15th av S.	1½ frame.			Store.	Boys with matches.	5.00	
16	5:30 p m	1424 Wash. st NE.	Haystack.		N. Lowenthal.	Store.	Lamp explosion.	125.00	
17	12:04 a m	1023 Wash. st NE.	3 brick.	— Leonis.		Dwelling.	Unknown.		
18	8:31 a m	624 21st av S.	2 frame.		M. D. LaRue.	Dwelling.	Phosphorus in basement.		
18	8:45 a m	615 University av SE	2 frame.			Dwelling.	Chimney fires.		
18	9:50 p m	Nicollet av & 27th st.	Motor No. 9.	M. L. & M. Ry. Co.	Same.	Meat market.	Headlight explosion.		
21	5:25 p m	2335 Stevens av.	2 frame.	— Robinson.	E. L. Jones.	Meat market.	Hot ashes.	5.00	
22	1:46 p m	812 Wash. av N.	2 frame.		P. Scheffer.	Dwelling.	Oil stove explosion.	2.00	
23	10:35 a m	4th st and 3d av SE.	Manure pile			Dwelling.	Fire crackers.		
24	10:51 a m	416 S 4th st.	2 frame.	Wm. Buddin.	Same.	Dwelling.	Chimney fire.	10.00	\$1,000.00
24	11:47 p m	2005 Wash. av S.	"			Meat market.	Carelessness.		
25	4:47 p m	19th av S and 22d st.	"	Jenson, Gilbranson & Co.		Factory.	From boiler.	30.00	18,000.00
26	6:28 p m	3225 Harriet av.	"	F. H. Hall.	Same.	Dwelling.	Spont. combustion.	50.00	2,500.00
27	7:35 a m	1610 N 4th st.	"	Margaret Lyman.		"	Spont. combustion.	50.00	1,000.00
27	9:16 p m	2005 5th av N.	"	L. D. McLean.	"	"	Unknown.	300.00	
29	2:05 p m	1601 N 5th st.	veneer.	C. Hildrich.	"	"	Child with matches.	15.00	1,000.00

JULY, 1890.

1	5:13 p m	312 N Colfax av.	1 frame.	Reaueandaarf.	Same.	Dwelling.	Spark from chimney.		
1	1:40 p m	526 Dell place.	"	Eugene Arnold.		"	Spontaneous comb'n	75.00	2,500.00
3	6:10 a m	2,409 9th av S.	"			"	Lamp explosion.		
3	1:53 p m	601 Spring st NE.	Haystack.			Haystack.	Fireworks.		
3	3:13 p m	116 6th st NE.	1 frame.			Dwelling.			
4	1:03 a m	Taylor st & 23d av NE	Brush heap.			Brush heap.	Unknown.		
4	8:20 a m	2,819 Blaisdell av.	2 frame.	J. T. Corbett.	Same.	Dwelling.	Fireworks.	1.00	1,200.00
4	12:55 p m	29 Bridge square.	"			Saloon.			
4	10:28 p m	1,105 Western av.	"			Saloon.			
4	10:35 p m	257 Nicollet av.	4 brick.	J. H. Wilson.	Same.	Dwelling.	"	10.00	
5	11:52 a m	109 32d av N.	2 frame.		Thos. Moore.	Saloon.	"	10.00	
5	1:45 p m	E 29th st & CM&SPRY	"			Dwelling.	Gasoline explosion.		
5	3:07 p m	Wash av & st P. M. & M	"	Mpls Harvester wks.		Platform.	Spark from stack.		
5	3:13 p m	1,227 Washington av N	3 brick.	St. P., M. & M. Ry Co.	Same.	Coalshed.	" locomotive.	5.00	
5	3:55 p m	Mr. Crve & Wvly avs	"			Plumber shop.	Gasoline stove mis-	taken for	fire.
5	11:03 p m	221½ Washington av S	3 brick.	E. Ferrant.	Geo. Bayless.	Paint shop.	Prairie fire.	6.00	4,300.00
6	5:50 a m	2d st and 35th st N.	Woodyard.	Mill Wood Co.	Same.	Woodyard.	Spontaneous comb'n	20.00	
6	3:27 p m	2,607 13th av S (rear).	1½ frame.	D. Pauley.		Barn.	Unknown.	40.00	100.00

6	3:44 p m	Water st & 12th av NE	Sawdust pile.	C. Larson.	Same.	Sawdust pile.	Spark from stack.	\$2,300.00	\$2,315.00
7	12:02 a m	3,500 18 ¹ / ₂ av S.	2 frame.	M St P & S Ste M Ry	Offices	House & barn.	Boys with matches.	15.00	
8	9:30 a m	44 Washington av S.	3 brick.	E. Ferrant.	Rosenbaum et al.	House & barn.	Boys with matches.	250.00	
9	11:25 a m	622-624 N 6th st.	2 frame.		Wright.	Restaurant.	Lamp explosion.		
10	10:25 p m	28 S 5th st.	2 brick.		J. B. Wheatley & Co	Store.	Electric cross.	10.00	1,900.00
11	3:05 a m	604 Nicollet av.	2 frame.	Ole Dahl.	Same.	Boarding house.	Carelessness.	25.00	
12	11:35 p m	1,414 S 3d st.	2 frame.	Mpls Elevator Co.	Same.	Barn.	Spark from chimney.	1.00	
13	7:33 p m	718 Nicollet av.	2 "	Wesley Nell	Unoccupied	Meat market.	Incendiary.	50.00	
14	3:30 a m	927 Cedar av.	2 "	H. B. Tillotson	Same.	Dwelling.	Gasoline explosion.		
15	7:55 a m	1320 SE 5th st.	2 "	Pioneer Fuel Co.		Woodyard.	Unknown.	5.00	
16	2:12 a m	6th st and 2d av N.	Woodyard	W. D. Van Norman.		Dwelling.	Carelessness.	35.00	1,000.00
17	9:52 p m	1008 Chicago av.	1 1/2 frame.	James Lane.	Sarah Baker	Planing mill.	Chimney fire.	5.00	
18	10:00 a m	5th av SE & Div sn st	1 "	J. T. Elwell.	Same	"	Sparks from stack.		
19	4:33 p m	1717-1725 E Franklin av	1 "	State Sash and Door	Ass'n	Junkshop	Overheated journal.		1,500.00
20	9:37 p m	315-351 10th av S.	3 "	Harris Bros.	Same	Dwelling.	Hot ashes.	471.78	2,000.00
21	3:30 p m	420 1st av S.	2 "	Josiah Town.	—	"	Unknown	450.00	1,000.00
22	2:45 a m	3241 S Lyndale av.	2 "	L. F. Menage.	Haufman	"	Boys with matches.		
23	11:30 a m	Foot of 7th av NE.	Shavings.			Paper mill.	Boiler kicked.		
24	2:44 p m	5th av S and 3d st.	3 frame.	Nelson-Spencer Pap	er Co.	Store.	Unknown.	75.00	200.00
25	2:44 p m	Rollins st & 4th av NE	4 brick.	H. K. Sidle	Tindson & L.	Bakery	Defective chimney.	300.00	
26	9:50 a m	510 Nicollet av.	1 frame.	C. Nelson.	Chester Oil Co	Warehouse.	Incendiary		
27	1:42 a m	908-910 S 3d st.	1 1/2 "	O. W. Owens.		"	Sparks from furnace	225.00	3,000.00
28	8:32 a m	M St P S S M Ry Shops	Shaving pile.	G. D. Lampson & Co.	W. T. Sillesky	Foundry.	Rekindled.	1,400.00	
29	7:06 p m	4th st bet 4th & 5th avs	1 frame.	Geo. M. Bryant.	Same.	"	Incendiary	5.00	
30	7:35 p m	2d st and 5th av S.	2 brick.	G. D. Lampson & Co.	W. T. Sillesky.	Factory			
31	11:59 p m	4th st bet 4th & 5th avs	2 "	H. L. Woodburn	Same.				

AUGUST, 1889.

1	8:00 a m	3113 15th av S.	2 frame.	G. Hush, agent.	E. Scott.	Dwelling	Incendiary.	35.00	1,300.00
2	8:30 a m	2401 S 2 ¹ / ₂ st.	2 "	H. W. Thilsh.	Same.	Elevator D.	Kerosene explosion.		
3	5:13 a m	8th av S and 3d st.	2 "			Barn	Incendiary		
4	7:00 a m	307 1st av S.	1 1/2 brick.	E. G. Corser.	Geo. Lindner.	Hotel	Unknown	50.00	
5	2:35 a m	1002-1004 N James av.	4 veneer			Stores.	Gasoline explosion.		
6	3:50 p m	2d st NE bet 10th av and Broadway	3 "						
7	5:42 a m	328 Nicollet av.	1 1/2 frame	A. Hartman.	Same.	Barn.	Child'n with matches	40.00	
8	4:30 p m	400 SE 6th st.	3 brick	Mrs. Gravile	Gillette & Bell.	Restaurant.	Gasoline explosion.		
9	8:27 a m	1308 E 21st st.	1 1/2 frame	C. J. Grundall.	Same.	Barn.	Boys with matches.	450.00	
10	5:10 p m	800 20th av S.	1 1/2 "	Hector Hays.		Dwelling	Chimney fire.	500.00	
11	8:50 a m	255 6th av S.	3 brick	G. Sivertson.	Thos. Wiltbank.	Laundry	Spontaneous comb.	10.00	600.00
12	9:11 a m	239 1st av S.	2 "			Tailor shop.	Carelessness.	25.00	
13	6:30 p m	Rear 73-75 S 6th st.	1 "			Rubbish pile.	Boys with matches		
14	4:16 p m	Colfax & Ch stn tavs	1 "			Rubbish pile.	Boys with matches.		
15	9:26 p m	725 25th av NE.	Frame.	A. Brush.	Same.	Shed.	Burning straw		

AUGUST—*Continue d*

Day.	Time of day.	Location.	Class of building.	Owner.	Occupant.	Use.	Cause.	Total loss.	Total insurance.
13	2:42 p m	216 Washington av S.	1 frame			Store	Unknown.	\$200.00	
16	2:00 a m	649 Washington av S.	"			Dwelling	Incendiary		
19	3:35 p m	1903 3d av S.	"		J. A. Edmund	"	Hot ashes.	50.00	\$800.00
20	12:05 a m	1212 E 24th st.	2 frame		Same.	"	Lightning.	10.00	700.00
24	12:56 a m	2414 27th av S.	"			Tree	Electric light wire.		
21	12:30 a m	E end Wash av br'dg.	2			Tinshop	Hot ashes.		
22	6:10 a m	109 Nicollet av.	3		Fletcher & Loring.	Restaurant.	Kerosene explosion.		
23	3:25 a m	326 N 3d st.	2 brick			Dwelling	Supposed incendiary	300.00	
24	4:15 a m	2620 31st av S.	2			Shaving pile.	Spark from loco.		
25	10:50 a m	1019-1021 Wash. av S.	2 frame			Shop	Unknown.		
26	5:20 a m	309 2d av S.	1			Store		50.00	
28	11:10 a m	319 14th av S.	1		R. W. York	Dwelling	Gasoline explosion		
28	1:48 a m	211 E Franklin av.	1		Mrs. Bennett	Barn	Spark from stove.	30.00	
31	4:00 a m	835 9th av NE.	2		E. J. Bolin	Dwelling.	Lamp explosion.	1,600.00	2,600.00
31	11:55 a m	837 9th av NE.	1 1/2		S. M. Paston	"		10.00	800.00
31	12:12 a m	311 5th av S.	1		Baker	"		200.00	
31		Lower end Henn Isld	3		City of Minneapolis.	Ampls garb ge crematory	Spark from chimney stack.		

SEPTEMBER, 1889.

2	10:25 p m	Bryant av M & M Ry.	1 frame.	T. J. Canney	Same.	Cedar blk. mill.	Spark from furnace.	2.50	
5	1:13 p m	215 Main st NE.	1 frame.	Mrs. Schultz	Geo. Boyer.	Dwelling	Defective stove pipe.	40.00	
6	4:50 p m	1022 Hennepin av.	1 False alarm.				False alarm.		
6	10:23 p m	1422 Washington av S.	2 frame.	Jno. Berg.	Anderson, et al.	Laundry &c.	Incendiary	500.00	
7	1:55 a m	2312 7th av S.	1	J. W. Stanchfield.	Same.	Smoke house.	Carelessness.	5.00	
10	7:20 a m	21-25 High st.	1 1/2		Mpls. Provision Co	Smoke house.			1,700.00
10	1:20 p m	715 Cedar av.	2	Schultz Bros.	— Ford	Out.	Carelessness.		
12	2:15 a m	2539 Stevens av.	2	D. S. Redding.	Same et al.	Store, &c.		50.00	2,000.00
13	3:30 a m	518 6th av N.	2	D. S. Maher.		Dwelling.	Rats with matches.	55.00	1,500.00
15	12:05 p m	119 1st st N.	2			Boarding house	Prairie fire.		
15	3:35 p m	18th av SE & M & M Ry.	2 frame	Chas. Couch	Mrs. Summers.	Boarding house	M'ch dr'd on curtain		
16	1:48 a m	36 S 10th st.	2 frame	J. Blichfeldt	Same.	Dwelling	Unknown.		
16	3:15 p m	18th av SE & M & M Ry.	2 frame			Prairie fire.	Cigar stub.		1,500.00
17	11:50 a m	Nicollet & Wash. avs	Under side w				Incendiary	2,500.00	1,600.00
18	2:50 a m	119 S 1st st.	2 frame	D. S. Maher.	Same.	Coal pile.	Spont. combustion.	3.00	
18	7:45 p m	15-17 N 1st st.	2 brick.	E. W. Dyer.	"	Barn.			
19	3:35 a m	Fort av and 28th st.	2 frame	N. W. Stove Co.	Same	Dwelling.	Defective flue		
20	9:50 a m	805 6th av S (rear).	2 frame	A. A. Camp.	Same	Barn.	Accidental	395.00	
20	2:27 p m	Mimnetonka Beach.	1 frame	S. R. Childs.	— Ollinger	Barn.	Lantern upset.	10.00	94,000.00
20	7:25 p m	745 Monroe st N (rear)	1 frame			Factory	Carelessness.		
20	8:45 p m	219 N 2d st.	4 brick.	A. H. Hinkle.	A. H. Ives & Co.				

20	9:23 p m	301 University av SE	2 frame.	Smith, Mrs. Hoferin	Same	Barns	Lantern exploded...	\$550.00	\$900.00
21	6:25 p m	284 S Aldrich av.	1 1/2 "	T. L. Wright	"	Barns	Carelessness	5.00	2,400.00
22	4:05 a m	118 N 1st st.	2 "	J. H. Hilger	Jas. Lindsey	Dwelling	Unknown	200.00	1,700.00
23	11:53 p m	3101 Clinton av.	2 "	G. Butler	Same	Dwelling	Cigar stub.	10.00	
24	11:03 a m	2319 Lyndale av S.	1 1/2 "	P. Rabinquist	Same	Barn	Unknown	600.00	
25	8:16 p m	741 Wash. av N.	3 "		Unoccupied	Store	Incendiary		
26	7:20 p m	103 E 16th st.	2 "	Geo. B. Sheppard	Same	Dwelling	Chimney fire		
27	5:44 p m	311 Hennepin av.	2 brick	C. H. A. Richter	Same	Tenement	Rubish on fire	70.00	
28	4:42 p m	West hotel	9 "	John F. West.	Helgeson Bros	Hotel	Sparks from chimney		
29	7:00 p m	281 Cedar av.	2 frame.	F. S. Gilson	Chas. Donegan	Grocery	Lamp explosion	500.00	2,400.00
30	4:36 a m	1119 Wash. av N.	2 "	A. Von Ende	J. T. Grant	Saloon, etc.	Incendiary	500.00	1,500.00
31	1913-1915-1917-1919 E	Franklin av.	2 "	C. B. Newcomb	Various	Tenement	Lamp explosion.	5.00	6,500.00
32	8:05 p m	420 1st av N.	2 "	Gale & Co.					
OCTOBER, 1889.									
1	11:36 a m	426 First av N.	2 frame.	Gale & Co.		Tenement	Unknown		
2	7:35 p m	516 Fifth st NE.	2 frame.			Dwelling	Lamp upset		
3	5:07 a m	Cor. Taylor and Win-							
4	5:51 p m	ter sts NE.	1 frame.	Mrs. Stephens	Eagle Co-op. Brl Co	Cooper shop	Unknown	\$2,000.00	\$3,000.00
5	9:28 p m	Cor. 4th st & 1st av S	8 brick	Min. Tribune Co.	Various	Offices, etc	From furnace	125,000.00	
6	12:03 p m	231 3d av SE.	2 frame.	M. H. Crittenden	Mrs. Miller	Dwelling	Lamp upset	20.00	1,600.00
7	11:07 p m	10th av ne & Wintr st	Sawdust pile				Spark from stack		
8	6:03 a m	Harrison st & Boly ne	1 frame.	Nelson, Tenney & Co		Dry kiln		5,200.00	4,000.00
9	10:27 p m	2905-2907 Stevens av	1 frame.			store, etc	Re-kindled stack		
10	7:53 p m	C. M. & S. L. P. Ry sh ps	2 veneer	Sarah E. Harrison	D. Harrison & Co.	store, etc	Incendiary	4,000.00	
11	2:50 a m	729 6th av N.	2 frame.		Unoccupied	store	False alarm	100.00	
12	10:08 a m	Cor. Western & Hum-					Incendiary		
13	12:30 p m	boldt av.	1 1/2 frame	E. G. Potter		Water closet	Hot ashes	15.00	
14	3:15 p m	408 Marshall NE.	2 frame.			Boarding house	Spark from stack	3.00	
15	7:35 p m	17th av SE.	2 frame.				Bog fire		
16	7:35 p m	Math st and 2d av SE	Rog afire			Iron works	Spark from stack		
17	6:35 a m	17 1st st N.	2 stone	Lockw'd Upton & Co		Dwelling	Carelessness		
18	11:13 pm	2611 25th av S.	2 "	G. Warnelon	Same	Dwelling	Carelessness-ashes	175.00	650.00
19	10:30 p m	2613 25th av S.	2 "					50.00	600.00
20	10:30 p m	216 Wash. av N.	2 veneer			Boarding house			
21	6:15 a m	108 Central av. rear.	2 frame.	C. H. Chase		Tenement	Unknown		
22	8:18 p m	Marshall & 21st av se	2 frame.				Bog fire		
23	2:24 a m	Marshall & 8th av N	Rog afire				Spark from stack		
24	7:20 p m	1519 S 9th st.	2 frame			Dwelling	Lamp upset		
25	3:15 p m	Marshall & 22d av se	Rog fire			Dwelling	Bog fire		
26	6:25 p m	2637 Aldrich av S.	1 1/2 frame	S. E. Farnum	H. H. Baker	Dwelling	Carelessness		
27	6:15 p m	Wash. & 22d av N.	1 frame			Red-hot stand.	Gasoline explosion		
28	10:38 a m	5th av S & 2d st.	1 brick			Boiler shop	Accidental		
29	4:30 p m	1513 Wash. av N.	2 frame.			Dwelling	Chimney fire		
30	3:28 p m	Cor. Western av and							
31	11:50 p m	Cedar Lake road	Woods afire						
32	24 S Dupont av.	2 frame.		J. B. Bassett	J. H. Reid	Dwelling	Woods on fire	700.00	500.00

OCTOBER—Continued.

Day	Time of day.	Location.	Class of building.	Owner.	Occupant.	Use.	Cause.	Total loss.	Total insurance.
16	6:25 p m	250 5th av N	2 frame.	John Perkins.	Frank Newton.	Dwelling.	Defective chimney.	\$20.00	
17	9:00 a m	113 13th av S	2 "	A. Carlson.	A. Carlson et al.	"	Spark from chimney.	100.00	
17	11:43 p m	1147 Lyndale av	2 "	J. F. Collum.	C. H. Peterson	"	Grass fire.	2.00	
17	12:45 p m	25th st & Stevens av	Vacant lot.				Spks from locomotive.		
17	7:35 p m	N. P. Ry & river NE	Wooden pier.				Ladie's dress on fire.		
17	7:30 a m	201 SE 4th st.	2 frame.				Carelessness—ashes.		
18	5:45 p m	908 8th av S.	Rubbish pile.				Spks from locomotive.	2.00	
19	12:45 p m	Frem'nt'ay & M&M Ry	Ties and bark	St. P., M. & M. Ry.	Same	Tenement	Carelessness—ashes.		
19	1:26 p m	1700 N 1st st.	2 frame.		A. Rivish.	Barber shop	Spks from locomotive.	1.00	
20	8:45 p m	7th av N & 2d st. Ry yd	Fl't of cold of wd			Store	Brush fire.	500.00	\$71,000.00
20	9:00 p m	Nicollet & Wash. av S.	2 stone.				Unknown	7,400.00	
21	11:30 a m	Cor. 12th av S & 6th st	2 brick	Jacoby	Ben Kruse	Dwelling.	Lamp explosion.	125.00	
21	9:51 p m	248 Nicollet av	2 brick	"	Ely & Hambricht	Barns	Carelessness.	100.00	2,500.00
22	9:05 p m	1207 Wash. av S.	2 frame.	H. S. Averill et al.	Same	Dwelling.	Unknown	200.00	
23	9:50 a m	3630 S Lyndale av	1 1/2 "	Mrs. Philbrook.	Ira Wordley.	Barn	Overheated stove.	10.00	1,000.00
25	4:20 p m	427 NE 3d st.	1 "	Mrs. Wirtensohn.	Same	Hotel	Unknown	15.00	90.00
26	5:40 a m	907 Plymouth av N	1 1/2 "	Mrs. Flaherty	"	"	Carelessness	30.00	650.00
27	12:15 p m	15-17 N 2d st.	3 veneer	P. B. Carl.	"	"	Incendiary	by board of health.	
28	9:20 p m	423 20th av S.	1 1/2 frame.						
29	1:20 a m	Chestnut av bet 16th and 17th sts	1 "	V. Truesdale.	"	Scale house.			
30	2:25 a m	409 11th av N.	2 "	D. Healey	R. Horn	Tenement.			
30	3:20 p m	1402 Wash. av S.	1 1/2 "		Unoccupied.	Barn.			
31	12:30 p m	Irving & 25th av N.	1 "	S. C. Gale & Co.	NOVEMBER, 1880.	Dwelling.			
1	7:14 a m	Hen'pin av & High st.	2 brick	M. N. Ry' Co.	Same	Union depot.	False alarm.		
1	7:30 a m	8th av N and 2d st.	1 frame.	N. P. E. R. Co.	Same	Switch house.	Accidental stove.		
1	5:40 p m	124 Wash av S.	1 Awning.			Saloon.	Electric light wire.	85.00	
2	8:33 p m	342 10th av S.	2 frame	C. S. Younglove.	Unoccupied.	Dwelling	Unknown.	150.00	
2	3:05 a m	222 N Grand av	1 1/2 "	J. G. Criel.	Same	"	Lamp explosion.	1,400.00	\$3,200.00
5	6:20 p m	1044 Harrison st NE.	1 1/2 "	B. Bleckenhall.	"	"	Supposed incendiary.	200.00	
6	12:27 a m	1010 2d av S.	1 1/2 "	Thos. Chambers.	W. Johnson.	Barn.	Incendiary	45.00	
9	10:25 a m	609 21st av S.	1 brick	Lessing	Same	Tenement.	Carelessness.	400.00	1,250.00
10	3:35 p m	965 3d av S.	3 "	J. W. Johnson.	Same	Barn.	Child with matches.		
11	1:20 p m	2200 Stevens av S.	2 "			Tenement.	Carelessness.	40.00	1,300.00
11	5:00 p m	1102 Wash av S.	2 "	Cassady & Findlay	E. J. Jacobson	Bakery	Spontaneous comb.	11.00	300.00
14	2:05 a m	2411 E 24th st.	2 brick.	C. Christianson.	Roberts & S	Store, etc.	Lamp exploded		
14	4:24 a m	3043 Nicollet av.	2 frame		Unoccupied	Dwelling.	Defective stovepipe.	90.00	4,300.00
16	1:35 p m	91-83 Western av N.	2 "	J. K. Miller.	Same.	"	Rekindled.		
16	10:35 p m	2726 Wash av N.	2 "	E. A. Hutchins.		"	Defective flue.		
16	11:56 p m	1235 1st av N.	2 "	E. A. Hutchins.		"	Gasoline stove.		
18	5:37 p m	119 4th st S.	1 frame	Pioneer Fuel Co.	Same	Office	Defective flue.	5.00	2,200.00
18	7:20 a m	23d av N and 3d st.	1 frame			Tenement.	Def. stove pipe.		
19	10:15 a m	1220 Wash av S.	3 brick.			"			
19	11:08 a m	703 Wash av S.	1 1/2 frame			"			

25	4:43 p m	3201 Nicollet av	12 1/2 frame	M. J. Delaney	Same	Dwelling	Overh'ted fireplace	\$85,000.00
25	5:30 p m	Oliver av & W 48th st	2	L. F. Menage	Unoccupied	Unknown	Unknown	2,000.00
25	9:38 p m	Cor 6th st & 11th av S	2	Co-operative	Shop Co	Factory	Sparks from furnace	25.00
27	12:55 a m	Har't av & W 34th st	2	Co-operative	Unoccupied	Dwelling	Unknown	
27	1:27 p m	13th av NE & 4th st	1			Shanty	Unknown	
28	5:05 a m	1307 E 26th st	1	White & Son	Same	Dwelling	Accidental	
28	7:22 p m	2328 Harrison st NE	1	Ruse Bros	Jno. Carey	Dwelling	Def. stove pipe	
28	6:35 p m	1127 Harmon place	2	C. E. Popp	Same	Dwelling	Gasoline stove	800.00
30	10:00 a m	692 Nicollet av	1		Same	Restaurant	Spark from loco	600.00
30	8:10 p m	Chestnut av & 16th st	1	Tribune Building Co	Same	Woodpile	Supposed incendiary	175,000.00
30	10:17 p m	4th st & 1st av S	6			Offices, etc.		
DECEMBER, 1889.								
1	6:10 p m	Cor Nicollet av & 3d st	5 stone	Bank of Minneapolis		Offices &c.	Smoke mistaken for fire	
2	1:55 a m	6th st and 3d av NE	2 frame	Farnham & L	Merriam B Co	Storehouse	Unknown	
2	4:15 p m	Br'dwy & Jek's n st NE	2			Dwelling	False alarm	
3	6:58 p m	45 N 12th st	1 1/2	S. B. Loye	Same	Barn	Unknown	100.00
3	1:41 a m	712 3d av S	2 1/2	C. C. Lyford		Vet. hospital		2,500.00
3	5:17 p m	421 4th st S	3	State of Minnesota		Hall	False alarm	
3	10:08 p m	Univer. Campus SE	3 stone				Unknown	5,000.00
4	6:17 p m	114 Hennepin av	2 frame	E. H. Boulton	Sherry Bros	Grocery	Chimney fire	1,600.00
4	6:27 p m	338 5th st NE	5				Unknown	
4	9:25 p m		2	C. C. Lyford	Same	Vet. hospital	Rekindled	
5	7:48 a m	712 3d av S	2 1/2				Overheated	
5	3:32 p m	6-8 E Lake st	1			Smoke house	Carelessness	
6	6:05 p m	919 8th av S	3			Dwelling	Salamander, false	
6	2:15 a m	700 Hennepin av	3	C. M. Pond	Unoccupied	Boarding house	Overheated ranged	1,500.00
6	5:35 p m	2420 Garfield av	2	C. E. Braden	Same	Dwelling	Rekindled	
6	2:46 p m	712 3d av S	2 1/2	C. C. Lyford		Vet. hospital	Carelessness	1,000.00
7	10:45 a m	819 25th av S	2	Jno. Moe		Dwelling	Spontaneous comb.	10.00
7	2:30 p m	1104 E 36th st	2	O. Acrocker			Unknown	4,400.00
9	5:10 p m	517 S 10th st	2	E. W. Eady		"	Swamp fire	50.00
9	5:57 p m	J'nston st & 24th av NE	3 frame	M. W. Pyle	Same	Union depot	Chimney fire	
9	6:25 p m	Bridge square	1			Boarding house	False salamander	
10	4:44 p m	700 Hennepin av	1	Kreger	Unoccupied	Shoe shop	Defective chimney	
11	10:05 p m	218 1/2 Washington av S	5 brick			Hotel	Gasoline explosion	
11	10:07 a m	2d st and 1st av S	4 frame	Orth Brewing Co		Brewery	Accident	400.00
14	1:30 a m	Mrshl st & 13th av NE	1 1/2	W. Johnson	Same	Dwelling	Overheated stove	300.00
14	5:37 p m	2801 E 26th st	2	J. K. Stafford	Various	Store &c	Carelessness	1,200.00
18	8:45 p m	715-717 3d av S	2	L. Stafford	Various	Roller room	Sparks from furnace	800.00
18	9:11 p m	Nicollet av and 5th st	1 frame	Mrs. S. Smith	W. Beuhler	Store	Unknown	25.00
19	2:05 a m	7th st SE bet 3d & 4th av	2	Chute Bros & Clough	Bros	Barn	Supposed incendiary	1,700.00
20	12:22 a m	30 Central av	1	L. Newstrom	Same	Woodshed	Child with matches	25.00
20	8:40 p m	2406 11th av S	3 brick	of potatoes	H. Osteryoung	Store	Carelessness	2,000.00
21	2:12 p m	1027 Washington av S	3 brick	Est. Skiles	M. A. Hall	Photo gallery	Spark from loco	30.00
21	6:00 p m	St P M & M R's Come av	2 frame			Barber shop	Spontaneous comb.	35.00
24	1:17 a m	324 Washington av N	1 1/2			False	Defective flue	15,000.00
24	5:08 p m	122-424 Hennepin av N	3 frame	Skyles	Unoccupied	Tenement	Salamander	
24	11:08 p m	Foot of 17th av N	3 frame	Gale & Rusk	Various	Store and dwell	Sparks from loco	125.00
25	4:53 a m	53 SE Main st	2	R. Pratt	W. Bellw	Dwelling	Defective stovepipe	3.00
26	7:25 p m	901 13th av S	2		J. Wells	Child with matches	Incendiary	5.00
27	2:10 a m	1907 S 7th st	2	W. Schmidt	Unoccupied	Cooper shop	Steam mistaken for smoke	
30	9:40 p m	1415 S 5th st	2	North Star	Manufacturing Co	Dwelling	Defective flue	60.00
31	6:05 p m	1411 N 4th st	2	Bingenheimer	R. Robonowitz			1,050.00

Recapitulation of Fire Losses, Insurance, etc.

Estimated loss on buildings.....	\$121,755.91
" " contents.....	151,119.75
Total.....	\$272,875.66
INSURANCE RECEIVED.	
Insurance on buildings.....	\$115,000.00
" " contents.....	145,000.00
Total.....	\$260,000.00
LOSSES OVER INSURANCE RECEIVED.	
Loss on buildings.....	\$6,755.91
" " contents.....	6,119.75
Total.....	\$12,875.66
INSURANCE INVOLVED.	
Total insurance on buildings.....	\$803,294.00
" " " contents.....	377,760.00
Total.....	\$1,181,054.00

COMPARISON FOR THE LAST TEN YEARS.

Year.	No. of alarms.	Loss.
1880.....	171	\$191,442.00
1881.....	164	439,321.00
1882.....	197	410,209.00
1883.....	298	660,070.00
1884.....	316	234,854.64
1885.....	348	233,349.50
1886.....	366	311,337.16
1887.....	379	1,360,247.61
1888.....	344	104,316.00
1889.....	484	272,875.66

Exhibit E.**REPORT OF THE SUPERINTENDENT
OF THE****FIRE ALARM TELEGRAPH.**

MINNEAPOLIS, MINN., January 1st, 1890.

F. L. Stetson, Esq., Chief Engineer Fire Department:

DEAR SIR—Herewith I submit my annual report of the workings of the Fire Alarm Telegraph for the year ending December 31st, 1889:

The following number of alarms has been received and transmitted:

First alarms.....	484
Second alarms.....	3
Second and Third combined.....	1
General alarms.....	1
Specials.....	6
Total.....	495

During the year the system has worked satisfactorily, giving reliable alarms to the department.

FIRE ALARM STATIONS.

The system has been extended in the 1st, 3d, 4th, 7th, 10th, 12th and 13th wards. Twelve new fire alarm stations have been added. The following is a list of their numbers and locations:

Station 175.	Soo Line Railway shops.
" 249.	Bloomington avenue and East Lake street.
" 267.	East Twenty-fifth street and Thirtieth avenue south.
" 271.	Sixth street and Ninth avenue south.
" 273.	East Seventeenth street and Ninth avenue south.
" 458.	Western and Newton avenues north.
" 461.	Plymouth avenue and Fourth street north.
" 462.	Lyndale avenue and Twenty-sixth avenue north.
" 463.	Second street and Thirty-second avenue north.
" 627.	Stevens avenue and East Sixteenth street.
" 635.	Chicago avenue and East Thirty-eighth street.
" 637.	Third avenue south and East Thirty-eighth street.

LINES.

A new line has been built to Shingle Creek Pumping Station and gong placed therein. One new circuit has been constructed, but cannot be operated until the underground system is completed.

AMERICAN DISTRICT TELEGRAPH.

The American District Telegraph as an auxiliary system is constantly growing in favor, furnishing as it does a rapid and reliable means of sending alarms to the department. The efficiency of its management and reliability of its operation strongly recommend it for residences and buildings, and more particularly those distant from fire alarm stations. Seventeen (17) alarms have been received from the A. D. T. during the past year.

RECOMMENDATIONS.

In the way of improvements to this branch of the department, would respectfully recommend that the present automatic be changed to a central office system, and circuits and boxes largely increased. The city in fire alarm facilities is hardly keeping pace with other cities of less population and commercial importance. What there is is good, but there is not enough of it.

In conclusion I would respectfully offer thanks for cordial assistance and courteous favors shown me.

Yours truly,

Z. T. MORRISON,

Sup't. Fire Alarm Telegraph.

Alarms, How Given.

Box.	Times.	Box.	Times.	Box.	Times.	Box.	Times.	Box.	Times.	Box.	Times.	Box.	Times.	Box.	Times.	Box.	Times.	Box.	Times.	Box.	Times.
8	2	24	2	41	2	67	5	132	4	149	1	174	1	237	2	265	1	425	3	452	5
9	2	25	1	42	3	69	6	135	2	152	1	213	1	238	1	314	1	426	2	453	1
12	10	26	1	45	3	71	1	136	4	153	3	214	5	241	3	316	1	427	2	357	1
13	6	27	1	46	3	76	6	138	1	154	2	215	5	245	1	317	2	429	1	612	1
14	4	28	2	47	2	78	1	139	2	157	3	216	2	245	6	318	1	431	2	614	3
15	3	32	2	48	2	121	6	142	2	158	3	217	2	246	2	321	4	432	5	621	3
16	10	34	6	49	2	123	5	143	2	162	1	218	1	247	2	324	6	435	3	623	2
17	6	35	1	61	2	125	5	145	2	164	1	219	3	248	1	341	2	436	4	625	1
18	2	36	3	63	1	126	3	146	5	165	1	231	4	261	4	342	2	437	1	631	2
19	9	37	3	64	3	127	1	147	1	172	1	234	1	263	2	345	4	438	4	632	1
21	1	38	1	65	1	129	3	148	3	173	2	236	3	264	2	423	2	451	1	634	1
23	2	39	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Box alarms.....	326
Still ".....	104
A. D. T. alarms.....	17
Telephone ".....	32
Personal service.....	5

Total.....	484
Second alarms.....	3
Second and Third combined.....	1
General alarm.....	1
Special calls.....	6

Grand total.....	495
------------------	-----

Table Showing the Month and Day of Alarms.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Sunday.....	2	1	3	3	1	4	3	1	8	6	1	3	36
Monday.....	7	6	1	11	5	5	5	6	11	5	6	6	73
Tuesday.....	6	11	8	9	6	5	14	4	3	8	4	8	86
Wednesday.....	8	9	8	3	6	5	7	3	3	8	3	8	70
Thursday.....	4	5	7	4	4	3	8	4	4	8	5	6	62
Friday.....	5	7	7	3	4	7	10	6	10	6	5	7	77
Saturday.....	3	9	7	12	9	4	4	10	3	5	9	5	80
Total.....	35	48	40	43	33	35	51	33	37	42	32	43	484

Exhibit F.

REPORT OF THE
VETERINARY SURGEON.

MINNEAPOLIS, MINN., January 1st, 1890.

F. L. Stetson, Esq., Chief Engineer Fire Department:

DEAR SIR—In submitting my report for the year just closed, I beg to acknowledge the uniform courtesy which has been shown throughout the department to me while in the discharge of my duties, and which has greatly aided me in my work.

There are six horses in the infirmary at the present time.

I would respectfully recommend the sale of several horses, which are totally unfit for department service.

Professional calls have been made at the several fire stations as follows:

A.....	95	M.....	41
B.....	16	N.....	50
C.....	75	O.....	78
D.....	23	P.....	14
E.....	40	Fire alarm telegraph.....	14
F.....	52	Police department.....	21
G.....	40	Water works.....	9
H.....	60	Workhouse.....	8
I.....	20	Sewer department.....	4
J.....	75	General and extra.....	43
K.....	28		
L.....	25	Total.....	839

The following is a summary of diseases requiring medical treatment from January 1, 1889, to December 31, 1889:

Scratches.....	7	Water ..	7
Laryngitis.....	12	Colds.....	10
Worms.....	19	Colic.....	16
Foul.....	20	Mouth.....	4
Footrot.....	1	Sweeney shoulder.....	6
Hips lame.....	3	Indigestion.....	2
Debility.....	20	Feet lame.....	45
Corns.....	15	Lampers.....	37
Bones broken.....	2	Catarrhal fever.....	5
Cuts.....	7	Pinkeye.....	5
Teeth.....	54	Catarrh.....	4
Interfering.....	9	Cough.....	45
Eyes.....	6	Surfeit.....	3
Abcesses.....	4	Lame back.....	2
Broken hip.....	1	Burnt.....	2
Cancer and warts.....	1	Hock.....	4
Bleeding head.....	2	Heaves.....	2
Founder.....	1	Pomney feet.....	1
Lung fever.....	4	Nasal gleet.....	1
Inflammation of stomach & bowels.....	2	Stifles.....	6
Quarter crack.....	4	Sore throat angina.....	8
Overwork.....	2	Quiter.....	1
Bronchitis.....	4	Rheumatism.....	7
Blind staggers.....	7	Rheumatic fever.....	3
Thrush.....	14	Dropsy.....	4
Influenza.....	6	Shoulder, sprain.....	5
Chills and fever.....	6	Lame shoulder.....	24
Warts.....	4	Loss of appetite.....	17
Cork foot.....	7	Legs.....	30
Knee sprung.....	2	Grease heel.....	1
Pastern wounds.....	8	Head.....	6
Broken foot.....	1	Cramp.....	3

RECAPITULATION.

Number of professional calls.....	839
“ diseases treated.....	571
“ visits.....	600

CLASSIFICATION.

Diseases of head and chest.....	245
“ abdomen.....	119
“ feet and legs.....	207
Total.....	571

During the year the department has lost only one horse, Sam, by accidentally falling on ice and breaking his hip. The average number of horses in the hospital during the year has been thirteen.

Respectfully submitted,

JNO. W. HORTON,
Veterinary Surgeon.

ANNUAL REPORT

OF THE

BOARD OF POLICE COMMISSION,

OF THE

City of Minneapolis

For the Fiscal Year Ending December 31, 1889.

COMMISSIONERS:

E. C. BABB, Mayor,
W. R. GUILLE,
N. H. GIERTSEN.

MINNEAPOLIS :
HARRISON & SMITH, PRINTERS.
1890.

BOARD OF POLICE COMMISSIONERS.

MAYOR E. C. BABB,

Ex-officio and President.

N. H. GIERTSEN,

Vice-President.

W. R. GUILLE,

W. M. BRACKETT,

Sup't of Police.

H. A. NORTON,

Police Clerk and Secretary.

SECOND ANNUAL REPORT

OF THE.

BOARD OF POLICE COMMISSIONERS.

MINNEAPOLIS, MINN., January 1, 1890.

To The Honorable, The City Council, City of Minneapolis:

GENTLEMEN—In compliance with section 12 of an act of the legislature to amend the city charter of the city of Minneapolis, approved March 5, 1887, and amended April 13, 1889, the board of police commissioners have the honor to herewith submit to you their second annual report, for twenty-one months, being from April 1, 1888, to January 1, 1890. No report was made for the year 1888-9 on account of several bills being introduced in the legislature looking to the changing or repealing of the law relative to the board of police commissioners. The law as finally amended is as follows:

AN ACT

[H. F. No. 433.]

TO AMEND THE CHARTER OF THE CITY OF MINNEAPOLIS, IN RESPECT TO APPOINTMENT OF POLICE COMMISSIONERS AND CONTROL OF THE POLICE.

Be it enacted by the Legislature of the State of Minnesota.

SECTION 1. That chapter six (6) of the charter of the city of Minneapolis, being that certain act entitled "An Act to amend and consolidate the charter of the city of Minneapolis," approved March 8, A. D. 1881, as amended by act approved March 5, A. D. 1887, entitled "An act to amend the charter of the city of Minneapolis in respect to the appointments and control of the police," is hereby amended so as to read as follows:

SECTION 1. There is hereby created and established in and for the said city, an official board, which shall be styled "The Board of Police Commissioners for the city of Minneapolis," in which shall be vested, subject only to the limitations herein contained, all the powers of said city, connected with and incident to the establishment, maintenance, appointment, discipline and control of its police. Said board shall have the custody and control of all books, records, teams, vehicles, telegraph and telephone lines and instruments, station houses, lockups and all other public property pertaining to the police department of said city, and may, out of any money appropriated by the city council for that purpose, provide and maintain such other buildings, facilities and equipments as it may deem essential to the efficiency of said police. It shall have authority to appoint and remove, at its pleasure, all members of the police force, including clerks, detectives, watchmen, jailors, teamsters and other employees, and to prescribe the title, rank and duties of each, and it may require a bond from any such members of said police force or other officers and fix the conditions thereof. It may fix the compensation of all such appointees, subject to the approval of the city council, and may make all needful rules and regulations for the efficiency and discipline of such police force, and may promulgate and enforce general and special orders for its government.

SEC. 2. Said board shall consist of three (3) commissioners, including the mayor of the city of Minneapolis, who shall be ex-officio a member of said board, and the president thereof. Within twenty (20) days after the passage and approval of this act, the governor of this state shall select and appoint from among the residents of the city of Minneapolis, two police commissioners, who, with the mayor of said city, shall constitute the board of police commissioners provided for in this act. That both of said police commissioners shall be selected or appointed one from each of the two dominant political parties. That such appointments shall be made in writing, and when made shall be forthwith filed in the office of the city clerk of said city, and thereupon the city clerk shall forthwith cause to be made and served upon the persons so selected and appointed as aforesaid a certified copy of such appointment. It shall be the duty of the persons so selected and appointed to qualify as hereinafter provided, within ten days after the receipt of the certified copy of their appointment, and in case such persons or either of them, shall refuse to qualify, or if a vacancy shall occur at any time in the board hereby created, by death, resignation

or otherwise, it shall be the duty of the city clerk to notify the said governor in writing thereof; and thereupon it shall be the duty the said governor, and he is hereby empowered to fill such vacancy by appointment, as herein provided, for the selection and appointment of commissioners. It shall be the duty of the persons so selected and appointed to file in the office of the city clerk, within five days after the notice of their appointment, as herein provided, their acceptance or refusal of the appointment in writing. That the term of office of the commissioners so selected and appointed, as herein provided, shall be four (4) years; provided, however, that the term of one of the commissioners first selected and appointed after the passage of this act, shall expire on the first Monday in January, 1891, and of the other on the first Monday in January, 1893, and the said governor shall designate in his appointment which of the persons so first selected and appointed shall serve for the short and which for the long term.

That in the month of December, 1890, and in the month of December bi-ennially thereafter, the said governor should select and appoint, as herein provided, one police commissioner for the term of four years.

That whenever an appointment is made, as herein provided, to fill a vacancy arising from any cause, the person appointed to fill such vacancy shall hold office for the unexpired portion of the term to which he was appointed, and in all cases, appointees under this act shall hold office until their successors are appointed and have qualified.

If for any reason the said governor should fail to make appointments as herein provided, such appointments may be made at any time thereafter, with the same force and effect as if made at the time herein provided.

No one appointed under the provisions of this act shall, during his term of office as police commissioner, hold any other office under the government of said city.

All necessary expenses incurred by the commissioners in the discharge of their official duties shall be a valid charge against said city, but all bills for such expenses shall first be approved by the city council.

Said board shall make to said city council a detailed report of its doings and expenditures—made or incurred—at the close of each quarter and an annual report at the close of each year; and shall, whenever called upon by said council, submit thereto for examination any of its books or papers and furnish information and estimates as to the needs and requirements of said department. It shall be the duty of the city council of said city to audit, allow and cause to be paid the salaries of all employees of said police force and all reasonable and proper charges and expenses incurred by said board in and about its administration of the police department of said city.

SEC. 3. Before exercising the duties of their office they shall severally take, subscribe and file in the office of the city clerk, an oath that they will support the Constitution of the United States and of the State of Minnesota, and faithfully perform the duties of their office; and that in no case will they favor the appointment or removal of any person to or from any position connected with said police force on account of any reason other than his fitness or unfitness in their best judgment.

SEC. 4. It shall be the duty of the board to provide that at all times of day and night, everywhere within the limits of said city and where the jurisdiction of said city shall extend, the public peace and order shall be preserved, crime prevented, offenders arrested, the rights of person and property protected, and all ordinances and laws in force in said city duly observed and enforced.

Said board shall have power to issue subpoenas, attested in the name of its president, to compel the attendance of witnesses before said board, in any proceeding authorized by its rules and regulations, and any member thereof may administer oaths to such witnesses. Such subpoenas may be served by any police officer.

It shall appoint one of its members as vice president of said board and fix the term of his office.

SEC. 5. Said board may in case of any mob, riot, pestilence, invasion or other emergency or for election days and days of public celebration or parade, appoint as many special policemen as it may deem necessary, who shall have all the powers and perform all the duties of regular policemen. The board may likewise, at the request of any person, society or organization, appoint policemen or watchmen, who shall serve without expense to the city and have police powers to preserve the peace and protect property within such limits and at such places as may be designated in such appointment, but such special policemen or watchmen shall not exercise any authority or wear any badge of office outside the limit so designated.

The two police commissioners appointed under the provisions of this act shall serve without compensation.

SEC. 6. Said board shall adopt suitable rules for the government of its meetings, and two members thereof shall constitute a quorum for the transaction of business.

SEC. 7. No person shall be appointed a member of the said police force who cannot read and write the English language understandingly, or who has been convicted of any crime. No person shall be appointed a member of said police force who shall not have been a resident and legal voter of said city for at least three years preceding his appointment; nor shall any person be appointed on the police force who is over thirty-eight (38) years of age, except he be an honorably discharged Union soldier or sailor of the United States.

All policemen so appointed shall possess all the common law and statutory power of constables, and and any warrant for search or arrest issued by any magistrate or court of record in Hennepin county, may be executed in any part of said city by any member of said police.

SEC. 8. Nothing herein contained shall give said board jurisdiction over such police force as the board of park commissioners of said city may, at any time, be authorized by law to organize and maintain; but the creation, management and direction of such park police shall remain where the same now are or may hereafter be vested by law.

SEC. 9. Until the appointment and qualification of the board of police commissioners, herein provided for, the present police commission of said city shall be continued in force, and all the provisions of said charter appertaining thereto, and which are hereby superseded, shall remain in full force and effect so far as may be necessary for the proper police protection of the said city; but immediately upon its organization under this act

said board shall assume control of said police, and thereafter administer the police department of said city under the provisions of this act.

SEC. 10. The said commissioners or either of them may be removed from office by the district court of said Hennepin county, after trial and conviction upon the petition with sworn charges, presented by not less than ten (10) reputable freeholders of said city, if it shall appear at said trial that the said commissioner or commissioners have been guilty of misdemeanor or malfeasance in office under this act.

SEC. 11. All acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

SEC. 12. This act shall take effect and be in force from and after its passage.

Approved April 13, A. D. 1889.

STATE OF MINNESOTA, }
SS.

DEPARTMENT OF STATE.

I, H. Mattson, secretary of state of the state of Minnesota, do hereby certify that I have compared the foregoing copy with the original act in my office of House File No. 433 and that said copy is a true and correct transcript of said original and of the whole thereof.

In testimony whereof, I have hereunto set my hand and affixed the great seal of the state, at the capital in St. Paul, on this eighteenth day of April, A. D. 1889.

[SEAL.]

H. MATTSON, *Secretary of State.*

POLICE FORCE.

The total number on the rolls of the police force March 31, 1888, was 169.

The following changes have been made in the department since that date:

Appointments	63
Resignations.....	17
Removals.....	15
Died	1

Leaving the total number on the force December 31, 1889, as follows:

Superintendent.....	1
Inspectors, detailed.....	7
Captains	5
Lieutenants.....	4
Sergeants.....	13
Sergeant, mounted.....	1
Patrolemen, mounted.....	16
Patrolemen	135
License Inspector, detailed..	1
Court Officers, detailed.....	4
Jailors, detailed.....	6
Drivers.....	6
Total	199

This force is distributed for duty in the different precincts as follows:

POLICE HEADQUARTERS.

City Hall.

Superintendent.....	1
Captain.....	1
Inspectors, detailed.....	7
License Inspector, detailed.....	1
Total	10

FIRST PRECINCT.

Central Station Lockup.

Captain.....	1
Lieutenant.....	1
Sergeants.....	4
Patrolman.....	51
Court Officers, detailed.....	4
Jailors,	2
Drivers,	2
Total	65

SECOND PRECINCT.

Corner Central Avenue and Main Street.

Captain.....	1
Lieutenant.....	1
Sergeants.....	3
Patrolmen.....	29
Total.....	34

CITY OF MINNEAPOLIS.

THIRD PRECINCT.

Cedar Avenue Corner Fourth Street.

Captain.....	1
Lieutenant.....	1
Sergeants.....	3
Patrolmen.....	26
Jailors, detailed.....	2
Drivers, detailed.....	2
Total.....	35

FOURTH PRECINCT.

1310 Washington Avenue North.

Captain.....	1
Lieutenant.....	1
Sergeants.....	3
Patrolmen.....	24
Jailors, detailed.....	2
Drivers, detailed.....	2
Total.....	33

FIFTH PRECINCT.

Twenty-eighth Street and Blaisdell Avenue.

Sergeant, mounted.....	1
Patrolmen, mounted.....	16
Patrolmen, foot.....	5
Total.....	22

EXPENSE OF DEPARTMENT.

Nine Months, April 1, 1888, to January 1, 1889.

Pay roll of the department.....	\$124,230.93
Head quarters—printing, stationery, telegrams, repairs, etc.....	1,509.37
First precinct—(central station) fuel, lights, repairs, etc.....	2,653.52
Second precinct—rent fuel, lights, repairs, etc.....	418.66
Third precinct—rent, fuel, lights, repairs, etc.....	551.85
Fourth precinct—rent, fuel, lights, repairs, etc.....	506.17
Fifth precinct—rent, fuel, lights, repairs, etc.....	29.35
Patrol wagon No. 1, central station—feed, repairs, etc.....	302.44
Patrol wagon No. 2, Third precinct—feed, repairs, etc.....	181.78
Signal service—rent telephone houses, repairs, etc.....	232.10
Property account—furniture, clubs, belts, helmets, etc.....	168.48
Board police commissioners—rent, telephone, stationery, etc.....	127.50
Total.....	\$130,972.15

EXPENSE OF DEPARTMENT.

January 1, 1889, to January 1, 1890.

Pay roll of the department.....	\$179,566.04
Head quarters—printing, stationery, telegrams, repairs, etc.....	2,136.01
First precinct—(central station) fuel, lights, repairs, etc.....	3,550.58
Second precinct—rent, fuel, lights, repairs, etc.....	489.72
Third precinct—rent, fuel, lights, repairs, etc.....	820.31
Fourth precinct—rent, fuel, lights, repairs, etc.....	603.84
Fifth precinct—rent, fuel, lights, repairs, etc.....	438.04
Patrol wagon No. 1, central station—feed, repairs, etc.....	531.87
Patrol wagon No. 2, Third precinct—feed, repairs, etc.....	257.68
Patrol wagon No. 3, Fourth precinct—feed, repairs, etc.....	141.94
Signal service—rent of telephones, repairs, etc.....	586.78
Property account—furniture, clubs, belts, helmets, etc.....	1,809.78
Board of police commissioners—salaries, rent of telephones, stationery, etc.....	1,505.04
Street car strike.....	1,551.00
Sundry bills, December 1888.....	252.92
Total.....	\$194,241.55

COMPLAINTS AGAINST OFFICERS.

Neglect of duty.....	9
Intoxication.....	11
Violation of the rules.....	4
Abusive treatment of prisoner.....	3
Malicious arrest.....	2
Absence without leave.....	2
Assault and battery.....	1
Obtaining leave of absence under false pretence.....	1
Asleep while on duty.....	2
Disobedience of orders.....	1
Conduct unbecoming and officer and gentleman.....	1
Total.....	37

FINDINGS.

Complaints dismissed.....	13
Removed from force.....	8
Reprimanded.....	5
Reprimanded and fined.....	5
Fined.....	6
Total.....	—37

VALUE OF REAL ESTATE.

Inventory of Public Property Appertaining to the Police Department, City of Minneapolis.

First precinct, central lock-up building.....	\$27,778.86
First precinct, rear 56x60, lot 7, and part of lot 8, blk. 38.....	22,000.00
Third precinct, 100 feet, lot 10, blk. 178, Minneapolis.....	5,000.00
Third precinct building, police stable.....	960.00
Third precinct, improvements in basement of Scandia bank for police station.....	4,671.50
Fourth precinct, lot 14, blk. 34, Case et als. addition to Minneapolis.....	2,500.00
Fifth precinct, Blaisdell & 28th st., building and improvements.....	1,000.00
Value of miscellaneous property, such as safes, desks, tables, chairs, clubs, belts, etc.....	3,000.00
Value of patrol wagons, sleighs, harness, three span of horses, etc.....	2,800.00
Total.....	\$69,710.36

The attention of your honorable body is called to the very complete report of the superintendent of police, clearly showing what is being accomplished in this department of our city government, and also its present needs in order to make it more efficient.

Respectfully submitted,

E. C. BABB, Mayor and President.

N. H. GIERTSEN.

W. R. GULE.

SUPERINTENDENT'S REPORT.

HEADQUARTERS POLICE DEPARTMENT, }
MINNEAPOLIS, MINN., January 1, 1890. }

To the Honorable the Board of Police Commissioners:

GENTLEMEN—I have the honor to herewith submit the annual report of the police department for the year ending December 31, 1889.

The composition of the force at this date is as follows:

Superintendent.....	1	Sidewalk inspector.....	1
Captains.....	5	Superintendent's clerk.....	1
Lieutenants.....	4	Pawnbroker inspector.....	1
Sergeants.....	14	Court officers.....	4
Detectives.....	5	Patrolmen.....	128
License inspector.....	1	Patrolmen, special duty.....	6
Patrolmen, mounted.....	16	Drivers.....	6
Jailors.....	6		
Total.....	199		

The distribution of the force for patrol duty throughout the city is as follows:

	Sergeants.	Patrolmen.	Total.
First patrol—7 a. m. to 6 p. m.....	4	*56	60
Second patrol—6 p. m. to 4 a. m.....	5	40	45
Third patrol—9 p. m. to 6 a. m.....	4	40	44
This makes the force on duty between 9 p. m. and 4 a. m.....	9	80	89

*Six of this number on post stations.

The day foot patrol covers a total of five (5) square miles, or 845 blocks—an average of 16 9-30 blocks for each man.

The night foot patrol covers an area of eight (8) square miles, or 1,352 blocks—an average of 16 72-80 blocks to each man.

The mounted patrol covers an area of 28½ square miles, or 4,816.5 blocks.

This leaves an area of 16½ square miles not covered or patrolled by either foot or mounted force; the total area of the city being fifty-three (53) square miles.

The shortest beat cared for by our officers is two (2) blocks; the longest seventy-six (76) blocks.

I desire, respectfully but earnestly, to call your attention to three (3) facts shown by the foregoing statement:

First. There are miles of streets in the city that are never visited by any member of the police force unless an officer is especially summoned.

Second. A majority of the beats are entirely too long to be adequately guarded and policed.

Third.—Fifty (50) additional patrolmen should be at once added to the force if the duties and responsibilities placed upon it by the commission are fulfilled, and the services which the public have a right to demand, is given.

In this connection I desire to call the attention of the commission to exhibit "A" (page 341) showing comparison with other cities, hereto attached.

EXPENSE.

This is one of the most important factors in the consideration of the administration of all municipal departments, but especially so of the police department.

Minneapolis has, with almost miraculous rapidity, developed from a village of a few thousands, to one of the leading cities of the west. And compared with other cities of like development it has as a rule been an orderly and law-abiding community. Hence the police department has been so far ignored by the governing authorities that it has fallen far behind the other administrative departments of the municipality. But notwithstanding these facts, there is a general impression prevailing in the community that the expenditures for police protection are onerous and extravagant. A careful consideration of the comparative statement herewith submitted will demonstrate that this department has been run not only with economy, but that its treatment has reached the border-land of absolute parsimony. A careful and painstaking study of exhibit "A" will demonstrate the perfect truthfulness and reliability of this statement.

This table, if it proves anything, shows conclusively that the public in demanding better service from the police department is asking something for nothing—is demanding labor without making provision for the payment of wages. The rule fixed by men of the largest practical experience in the management of police affairs, is that a municipal police force should number at least one member for each seven hundred (700) of population. You will observe that the Minneapolis force numbers but one member for each twelve hundred (1200) of population.

The five cities noted (see table) shows an average cost of police (per capita of population) of \$1.44, while the cost in this city is 88 cents per capita—or, in other words about 40 per cent. less than the five cities named.

In this connection I also wish to call your attention to exhibit "B" (page 341) showing comparative cost during past five (5) years of our department and demonstrating that the expenditures of this department last year (taking into consideration the population) was less than former years.

DISCIPLINE.

While the department has done most creditable and efficient work during the past year, and I have noticed a marked improvement in the discipline of the force, it has not as yet arrived at the high standard I believe to be attainable. The members of the force have manifested a commendable desire to conform to all rules and regulations. I am yet constrained to confess that there still remains some discordant elements traceable to a lack of discipline in the past, which seriously mar the efficiency of the force and which must be eradicated before the best results can be obtained. There are also some other and minor drawbacks to the improvement of the force, the chief being a want of numbers as before mentioned, and lack of station houses, drill rooms, gymnasium, etc., for physical training.

By force of the very nature of the duties to be performed a police force is semi-military in its organization and modes of discipline. The first lesson to be learned is implicit obedience to order. An officer attempting to make "a law unto himself," for his particular beat and entirely independent of instructions or of the charter and ordinances, soon becomes worse than useless upon the force—he is a drawback and a stumbling-block in the way of others who are honestly striving to do their duty. Or, if an officer attempts to temporize with crime or show leniency to criminals, he not only places himself in the power of unscrupulous men and women, and thus paves his own way to ruin, but he compromises other and better men who are trying to do their duty conscientiously. Police officers are too apt to desire to be considered "good fellows," and thus shrink from making enemies of violators of the law, in hopes by that means to secure favor, a long term in office

or promotion through political favoritism. A political policeman is an unmitigated nuisance—the worst and most dangerous type of demagogue. He reasons from the false standpoint that the influence of the criminal classes—especially that demoralizing and ungovernable monster known as the liquor interest—is sufficient to control the whole social system and make his position and promotion absolutely certain. Acting upon this belief he ignores every legal requirement of his office, and before he is aware of the fact himself he becomes the sworn ally and partner of those who profit by violating the laws of the land. The officer who is “a good fellow” is liable to be a bad officer. The duties of the police are of such a character that it is absolutely impossible for a conscientious officer to pander in the smallest degree to the wishes of the disorderly element.

This fireman, in response to an alarm, bravely rushes to a place of peril and bravely fights against the elements. All honor to his manly calling; but he does not war with the passions, wants and desires of vicious men and women, as do the police. When the contest of the fireman is done all classes unite in doing honor to the noble efforts of the fireman. The police force respond to the same alarm with the firemen, form a cordon around the premises so that the firemen will not be interfered with in their work, look after the property that may be removed from the burning building, force back the idle, curious crowd that always congregates, and after hours of hard labor return to their regular beats followed by abuse and curses—often, too, of reputable citizens. Again, respectable business men fail to comply with, or wilfully violate certain ordinances. It is the sworn duty of the officer to bring this good citizen into court. He discharges that duty promptly, and gets the lasting enmity of not only the respectable business man, but of all the large circle of friends of the said business man.

The public at large have but little conception of the difficult and often perplexing position in which officers are daily placed. At best, the lot of an honest policeman is not a happy one.

Your honorable board has found it necessary in some instances in order to enforce discipline to suspend and remove some officers of the force for cause. These suspensions and removals have seemed to some good citizens to be dictated by selfish or trivial notions, because such citizens have had no just conception of all the surrounding and incidental facts and circumstances. Hence adverse criticism has followed. But it should be understood by all intelligent citizens that the board is best equipped to judge of the evidence adduced and to act upon it. In every case the accused officer is given the benefit of every doubt, and in no instance has there been suspension or removal without ample reason; and I desire to bear testimony to your entire and perfect impartiality in every instance coming under my observation.

THE DETECTIVE FORCE.

I desire to call especial attention to the detective department during the year just closed. When I assumed control of the police, this force was reduced two (2) in number, and the office of chief detective dispensed with. The detectives retained were placed under my immediate command and supervision. Exhibit “C,” page 342, shows this work in detail.

This is one of the most useful and important branches of the force, and the city has been exceedingly fortunate in securing the services of a class of men who are second to none in the country for this delicate and laborious service—men who have had long years of experience in this particular field, who are intelligent and enthusiastic in their work; and above all honest and fearless in the discharge of their duties. Crooks, criminals and tramp thieves have found this city very unhealthy as a tarrying place, and the vigorous work of this department in “spotting” the suspicious clansmen on their arrival and placing them in the workhouse for 60 or 90 days, has had a most excellent effect in deterring their friends from paying us a visit.

Your attention is called to the large amount of property recovered by the department during the past year.

LICENSE INSPECTOR.

This division of the department has been ably and efficiently conducted by Inspector Enoch Ray, whose report accompanies this and deserves your careful consideration.

RECOMMENDATIONS.

Increase of the force.—I respectfully offer the following recommendations:

First. That the force be immediately increased to two hundred and fifty (250) members. This number is conservative in comparison with other cities of the size, importance and wealth of Minneapolis.

The number recommended above would give the city one (1) officer to each 920 inhabitants. It is a self-evident necessity that the foot patrol beats should be extended in a number of directions—especially in the northeast, northwest and south; and that some of the inside beats be reduced; also that more men be provided on post stations—*i. e.* at the principal crossings in the heart of the city.

Second.—Stations. That immediate steps be taken to erect two (2) police stations of modern style, one in the third precinct and one (1) in the fourth, on lots now owned by the city. At this time the city owns but one station (the Central), and that one, although but recently built, needs many improvements to make it suitable to the requirements of the department. The lot adjacent thereto, fronting on First avenue south, should be at once bought or condemned, thereby making it possible to erect a suitable building to accommodate the Municipal Court and officers connected therewith—police head quarters, gymnasium and drill room.

In this building as well as in all other new station houses erected, provision should be made for sleeping and furnishing meals to the entire force in each precinct whenever a continuous reserve is needed. The force in the second precinct is occupying a rented basement room on the corner of Main street and Central avenue, provided with no cells or other conveniences, and entirely inadequate for the purposes required. I trust that the honorable city council will see the necessity of taking immediate steps toward purchasing or condemning suitable property and the erection of a building in this precinct. The third precinct force also occupies a rented basement under the Scandia bank containing a few wooden cells, but wholly unfitted for use if sanitary laws are to be considered of any value. The city owns a suitable corner lot in this precinct and I hope that immediate steps will be taken to build a proper building thereon.

The fourth precinct force is also domiciled in a rented basement at the corner of Plymouth and Washington avenues. This location is absolutely valueless—so much so that we have been compelled, because of defective sewerage and ventilation, to abandon the use of the cells. This necessitates the transportation of prisoners arrested in this precinct to the central station—from one to two miles distant.

During the past year the city purchased a lot on the corner of Third street and Nineteenth avenue north for the use of the police department, and it is hoped to have a suitable building started thereon in the spring and completed as soon as possible.

The fifth precinct force occupies a small wooden building located in the rear of the engine house on Twenty-sixth street and Blaisdell avenue, which contains but two cells. While unsuitable in many particulars it is far superior to any other station in the city except the central station. I would recommend the immediate purchase of a suitable lot in this precinct, as a modern station will be required in this locality at an early day.

WORK OF THE DEPARTMENT.

(The following exhibit to show the work of the department in detail.)

I desire to say a few words with regard to some of the special features of our work during the past year.

SALOONS.

The saloon has always been a source of great trouble to those entrusted with the enforcement of municipal laws. The liquor traffic has sometimes received so little attention from city administrations in Minneapolis that to require an honest enforcement of the laws relating thereto arouses a sentiment and an opposition which has indeed made it unpleasant and which makes the work of the department more than double as great. At times in our city there has been a general disregard of the laws which require that the saloons shall be closed at midnight and remain closed during Sunday,

after such condition had been permitted to exist it was perhaps only reasonable to find those engaged in the traffic as well as many others, declaring the innovation of this administration, arbitrary, unreasonable, unjust, and a flagrant interference with what people who ought to know better are pleased to term "personal liberty." A former city council had refused to pass an ordinance which would make it possible to punish saloon-keepers for violating the law, and the state law was practically unobserved. The police had got used to this state of things. They had been overlooking the saloon. It was therefore only reasonable to expect the saloon men to be solidly arrayed against the proposition to enforce the laws so far as it applied to their business. But the desired results has been accomplished, and that too with a great deal less trouble than was at first anticipated. It is but voicing the sentiment of some of the oldest and most reliable and observing officers in the department to say that at no time during the past decade has the Sunday closing law been so thoroughly enforced as at present.

But this has not been due to the efforts of the department alone, by any means. The saloon-keepers, or at least a great majority of them are to be commended for the stand they have taken in this matter; as soon as they found that the authorities were in earnest about this matter they said they did not object to Sunday closing if we did not discriminate but oblige all to observe the law. The department has tried to enforce the law fairly and impartially and without fear or favor and that these efforts have been successful will be made apparent to any fair minded man who cares to investigate.

GAMBLING.

It has been the aim of this department to enforce the laws in regard to gambling. We think the city is more free from this vice than during the past ten years. There is no "open and notorious" gambling in Minneapolis, but there are unquestionably a number of private or semi-private poker rooms where men who are unfortunately possessed with the determination to gamble indulge this propensity. These rooms are conducted in a manner which makes it almost impossible for the law to reach them. Now and then a social organization has set apart rooms where members of a "speculative" turn of mind might enjoy themselves, as a general thing the playing is confined wholly to members of the club and is a feature of evil which seems inseparable from metropolitan notions and one which is exceedingly difficult to deal with. There is no common resort in this city where the mechanic, the clerk or the accountant is allowed to risk his own or his employer's money except the pool room which the law of the state does not interfere with.

PRIZE FIGHTING.

A year ago this was the "sport" most talked about in Minneapolis. The public fights were spoken of as "glove contests." A better name and one which would be entirely indicative of the real character of these periodical affairs would be "prize fights." The more delicate name of "glove contest" was intended for the people who never attended these exhibitions and whose publicly avowed hostility to them might be prevented by not using the harsher but more truthful description.

These affairs were of frequent occurrence, and after having extended over a series of years, it was not at all surprising to find pugilism occupying no inconsiderable part of the public mind. In fact there existed here a pugilistic mania. Old men, young men and even boys, no where near their majority, seemed to be carried away with this queer amusement. That all this had a most pernicious effect, especially upon the young men and boys, is a truth which many of the most ardent and enthusiastic devotees of the manly art have frequently admitted. Early in the year it was decided to put a stop to these exhibitions and they have since been unknown.

STREET CAR STRIKE.

Unquestionably the hardest task during the year was the trouble incident to the great street car strike in April, and which continued thirteen (13) days. Some special features in this work will bear particular mention. The strike was inaugurated under very peculiar circumstances. These conditions were such as to make the work of the police doubly difficult. The strikers had

the sympathy of the general public. More than that, there were many of the police officers who were so heartily in sympathy with the strikers that it interfered, at least to an extent, with the prompt and decisive enforcement of the laws. Many of the officers, however, while personally of the opinion that the street car employes were justified in striking and in resorting to all peaceful means to prevent others from taking their places, had so keen and intelligent appreciation of the duties of paid guardians of the peace that they were always as particular to obey the orders of their superiors and prevent disorder and crime as they had been upon occasions where the moral and property rights of their fellows were not involved, but the generally prevalent and apparently intense feeling which citizens, and especially the masses of working people had in the contest, very naturally had its effect upon the police. The strikers themselves appreciated these facts, and being assured that the people and the police were with them in their struggle, they became emboldened, and resorted to methods and tactics which perhaps they would not have employed under ordinary circumstances. The sympathy which the public showed the strikers make the situation an exceedingly delicate one and suggested that the greatest care and caution be exercised in dealing with the strikers and their friends and sympathizers who joined with them in their demonstrations.

Everybody remembers the fever heat of excitement of the strikers and the determined stand of the company. The situation was so delicate and perilous that leading citizens who would ordinarily advise that a vigorous and aggressive stand be taken by the authorities, in this case was convinced that discretion was the better part of valor, and that the situation should be handled carefully, so long as the strikers refrained from direct acts of violence, as with this peculiarly uncertain conditions which prevailed, it would have required but very little to precipitate very serious trouble which would have perhaps left a very disgraceful page upon the industrial history of our city. The disorders incident to that strike were not quelled without effort. That they were quelled without loss of life is a fact which seems to me is greatly to the credit of our police department. It was a comparatively peaceful consummation of a very serious and earnest strike, a thing for which every honest and worthy citizen had devoutly prayed. The sympathy which was so manifest among the officers became less so when the strikers or their indiscreet friends resorted to violence. In their efforts to impress upon people the necessity of refraining from violence or even from acts which during a critical period were calculated to lead to trouble, the officers received the co-operation of the municipal judge to an extent which your honorable board can very easily second. The attitude of the municipal magistrate during that exciting period unquestionably did a great deal towards creating respect for law and order and bringing the strike to an end.

POLICE TELEGRAPH.

One of the most important and useful adjuncts to the department is the police telegraph and telephone system. Although this department has only seventeen boxes in operation, yet you will learn by reference to exhibit "E" (page 343) that the central office has received 114,379 reports—or an average of 313 per day. Of those reports 110,762 are from patrolmen and sergeants on duty, who are expected to report at stated intervals. With the limited number of stations a large proportion of the force have no direct means of communication with headquarters. There should at once be provided a sufficient number of stations conveniently located at or contiguous to the conjunction of beats that every officer on duty could report at least once every hour or oftener if necessary. This would place every section of the city in close communication with headquarters and thus facilitate co-operation among all members of the department when such co-operation was required. Such unity of action often materially assists in making important arrests with promptness and certainty, and enables the superintendent to concentrate the force, or any part of it, at a given point with the least loss of time. It also enables a patrolman in any part of the city to communicate the fact of an arrest without leaving his beat exposed, and gives immediate and accurate knowledge of the whereabouts of each and every officer on duty. In fact, the system has come to be a prime necessity in the satisfactory management of an effective police force; and should without further delay, be so

extended that every quarter of the city, no matter how isolated, would have the benefit of it and through it, of adequate police protection.

Under this head I would recommend the immediate purchase of another span of horses to be used as a relief team on the central patrol wagon. This wagon does the major portion of the work, and it would be in the line of strict economy to have a relief team that could be used in case of disability of the horses, or to give the regulars adequate rest.

POLICE RELIEF ASSOCIATION.

I would respectfully call the attention of the board to the desirability of establishing a relief association for the members of the police force of the city, and their families and dependents. The nucleus of a fund of this character is already in existence, amounting to about \$400. Such fund should be used for such deserving members of the force as were sick, injured or disabled, or in case of the death of an officer to provide for the immediate wants of those who were dependent upon his salary or income; or in the way of a pension to such members of the force as may be incapacitated for duty through injuries received while discharging their official functions. Such fund might be created without taxing the property of citizens, but placing therein all special rewards offered for the arrest of criminals or the recovery of stolen property: fees for extraordinary or extra hazardous services; money accruing from the sale of unclaimed property; fines imposed upon members of the force for dereliction of duty, and by a small monthly tax levied upon the members and officers of the force. This system is now coming into general use in other cities, and it seems to me the time has arrived for its adoption in Minneapolis.

CONCEALED WEAPONS.

I would earnestly recommend that the board place before the city council the immediate importance of enacting an ordinance to license, prohibit, regulate and control the carrying of concealed weapons, and to provide for the confiscation of the same, in accordance with the provisions of the city charter, page 53. This custom is growing more and more dangerous, and while the ordinary law-abiding citizen seldom sees the necessity of carrying deadly weapons, the criminal classes, and those holding the laws of the land in contempt, are invariably armed with deadly weapons, and often upon the slightest provocation put them to murderous uses.

The first thing the young hoodlum or apprentice in crime provides himself with is a pistol or slung-shot; and as there is no law covering the carrying of deadly weapons except the legislative enactment, it is difficult for the municipal authorities to take prompt and effective action regarding the offense. The ordinance should provide that the superintendent of police may, upon application in writing setting forth under oath sufficient reasons, to be approved by him, issue to such person a permit in writing to carry a pistol within the limits of the city upon the payment of an annual fee of one or two or three dollars, such permit being subject to revocation at any time. The penalty for carrying, or having upon or concealed about the person at any time weapons of a deadly character without such permit should be punished by a fine of \$25 to \$100.

PRIVATE DETECTIVES.

I now approach a subject delicate to handle, and yet one that vitally affects the continued well-being of society. All history is filled with the lesson that the system of public or private espionage over the doings of citizens, their daily and hourly incomings and outgoings is vicious in its entire tendency, demoralizing to society and subversion of the ends of all good government. The growth of private detective agencies of late years in all the large centers of population in America is a parasitical disease which has fastened itself upon the vitals of our institutions and will continue to spread demoralization unless the constituted authorities control and regulate them with a strong hand.

The large and constantly increasing class—male and female—calling themselves “private detectives” which infests all large cities to-day is mainly—not invariably—composed of professional blackmailers and panderers to every crime written in the statute books of God and men. No life in the com-

munity is so pure and faultless as to be safe from the machinations of these human ghouls; no act so innocent that it may not be perverted to the vile uses of their calling.

Under the laws as they exist it is extremely difficult to adequately guard and protect innocent people from these inhuman "wolves seeking whom they may devour," or bleed. I attempted at the last legislature to have enacted a law providing for the control and government of these so-called detective agencies. This bill passed one branch of the legislature, but was lost in the turmoil of the closing days in the other house. An effort will be made early at the next meeting of the law-makers, and it is to be hoped with better success.

No one knows as well as the legal and recognized police authorities of the large cities of the length and breadth and height and depth of this constantly augmenting evil. In Minneapolis, during the past year, good and respectable citizens, innocent of crime or the thought of crime, have been bled of hundreds of dollars simply because they feared public scandal and dreaded the revenge of characterless adventurers should they undertake the prosecution of these vile men and women under the law. This department has "called off" a few of these people when complaint has been made, but in every instance the complainant has refused to prosecute because of public scandal.

The existing state law is not sufficient protection, and in its operation is too cumbersome to successfully prosecute under it, and it is desirable that it should be so revised and amended by the coming session of the legislature that it will be of use in suppressing this growing evil.

NEWSBOYS AND BOOTBLACKS.

The street is the preparatory department of the school of crime. The newsboys and bootblacks are often the apt and intelligent pupils of the infant class of wickedness. This army of undeveloped and infantile wrongdoers is being constantly augmented and increased. It is remarkable that in this day of refinement, enlightenment and boasted civilization, nothing further than preparatory efforts have been made to break up this breeding-school of vice, crime and villainy. Can anyone give a good and sufficient reason why newspapers should be hawked upon the streets more than dry goods or groceries? If these children are dependent upon their daily profits for bread, it would be infinitely cheaper for society in the long run, to furnish comfortable homes, wholesome food and educational facilities for them at public cost, than to give them up to the criminal teachings of the public streets. But a careful examination of the habits, manners and doings of this class will prove to any one that when there is one dollar of their earnings that goes to a good and useful purpose there are hundreds go to cultivate vile habits and vicious practices.

I do not have any hopes of the possibility of curing this plague spot upon the body social. The disease has grown chronic and the eyes of benevolence look clear over the heads of these pagan waifs—forgotten remnants in a Christian civilization—while seeking to confer spiritual blessings on unknown and barbarous dwellers in foreign lands.

A State law for compulsory education would thin the ranks some, and a municipal ordinance giving perfect police control of these guilds of the street would help a little. But the cure, probably, lies in the very dim and distant future, when clean and well fed American citizens begin to carefully study social problems right at home.

BERTILLON SYSTEM.

The Bertillon system of identification of criminals was adopted by this department in March, 1889, and we are very much pleased with the results thus far, and as the principal police departments throughout the country adopt this system, which we learn they are doing very rapidly, the mutual benefit derived therefrom will be of incalculable value. To quote the author's words, "this system, where used, fixes the human personalities, gives to each human being an identity, an individuality, certain, durable, invariable, always recognizable and always capable of being proven.

MOUNTED PATROL.

This branch of the department deserves special mention for their very efficient services during the strike and in many ways during the past year. This force should be increased to at least twenty (20) men during the coming year.

POLICE MATRON.

The propriety, if not the necessity, for the employment of a matron at Central station to have charge of all female prisoners, was recognized by the board and we were very fortunate in securing the services of Mrs. Louisa Paine in this position, who took charge of this department last February, and we find her fully qualified to fill this difficult and often very disagreeable office.

SIDEWALK INSPECTOR.

This branch of the department has been in charge of Inspector F. De Haven, whose report accompanies this, and I would respectfully ask a careful examination of same. He has also rendered valuable and efficient aid to the city attorney in looking up and securing evidence in all damage suits arising from accidents, against the city.

CONCLUSION.

We desire to express our obligations to all the principal police departments throughout the United States and Canada for courtesies extended to us.

To the Honorable Board of Police Commissioners:

I desire to express my sincere thanks for their hearty co-operation in every thing pertaining to the increased efficiency of the department.

Respectfully submitted,

W. M. BRACKETT,

Superintendent of Police.

"A."

Comparative Cost, etc., Police Departments in Cities, as follows:

Year.	PLACE.	Population.	Annual expense of police department.	No. of police.	Average cost of police per capita.	Average population to each police.
1888	Providence, Rhode Island.....	122,000	\$236,600	206	\$1.94	592
1888	Buffalo, New York.....	240,000	363,050	340	1.51	706
1888	Cincinnati, Ohio.....	325,000	433,130	466	1.33	697
1888	Detroit, Michigan.....	220,000	288,347	310	1.31	709
1888	Cleveland, Ohio.....	230,000	256,352	241	1.11	954
	Average of the above five cities.....				1.44	731
1889	Minneapolis.....	220,000	195,000	182	.88	1,209
	A conservative estimate of what Minneapolis should have.....	230,000	263,500	250	1.15	920

"B."

Comparative Cost, etc., Minneapolis, Past Four Years.

YEAR.	Population.	Number of police.	Expense of police department.	Average cost police dept. per capita.	Average population to each patrolm'n
1886.....	120,000	114	\$108,233.33	\$0.90	1,052
1887.....	150,000	169	170,773.63	1.13	888
1888.....	190,000	169	174,489.08	0.91	1,124
1889.....	220,000	182	195,000.00	0.88	1,209

"C."

Detective Department.

MONTHS.	Amount of personal property reported stolen.	Amount of property recovered.	Number of arrests.
January	\$4,445.00	\$2,655.00	44
February	3,160.00	1,896.00	41
March	1,670.00	1,000.00	21
April	2,945.00	1,768.00	43
May	4,510.00	2,705.00	27
June	990.00	585.00	27
July	995.00	585.00	27
August	1,760.00	1,055.00	10
September	1,770.00	1,062.00	23
October	2,405.00	1,443.15	16
November	1,812.50	1,087.50	25
December	1,370.00	822.00	40
Total	\$28,832.75	\$16,663.65	344

MONTHS.	No. of prisoners convicted.	Number of arrests for other cities.	Value of horses and carriages reported lost and stolen, recovered.
January	30	1	\$4,450
February	38	1	10,150
March	14	2	8,000
April	35	1	6,000
May	33	0	5,000
June	23	2	7,000
July	24	3	7,000
August	7	0	4,000
September	9	0	4,200
October	8	3	5,200
November	20	3	5,000
December	20	3	5,000
Total	250	19	\$61,100

NOTE.—Three horses not recovered of those reported.

Detective Department—Pawnbrokers' Reports.

MONTHS.	No. of daily reports received.	No. of pledges and purchases reported.	No. of pledges copied and recorded.
January	298	1,509	302
February	251	1,299	259
March	307	1,873	355
April	317	2,086	417
May	313	1,416	283
June	331	1,574	313
July	307	1,427	285
August	434	1,633	326
September	388	1,593	318
October	250	1,602	321
November	291	1,306	261
December	388	1,600	320
Total	3,875	18,918	3,760

"D."

Superintendent of Police. Office.

Complaints (written) investigated.....	730
Complaints (verbal) investigated.....	3,650
Letters and telegrams acted on and recorded.....	2,555
Letters and telegrams sent out and recorded.....	2,920
Circulars and postal cards issued.....	1,460
Circulars and postals from other cities acted on and filed.....	3,600

"E."

Report of Signal Service and Telephone Department.

MONTHS.	Calls from officers through patrol boxes.	Calls for the patrol wagon.	Fires attended by patrol wagon.
January.....	7,246	109	5
February.....	9,410	70	12
March.....	10,057	141	8
April.....	5,616	135	10
May.....	8,933	154	4
June.....	9,442	154	2
July.....	8,765	155	2
August.....	9,785	179	2
September.....	10,168	158	2
October.....	10,667	189	2
November.....	11,374	156	7
December.....	9,305	135	9
Total.....	110,762	1,735	90

MONTHS.	Complaints by telephone.	Calls for officers by telephone.	Dead animals reported by telephone.	Buildings found open and reported.
January.....	53	32	14	13
February.....	42	12	11	7
March.....	50	22	14	9
April.....	110	60	14	7
May.....	145	40	16	0
June.....	108	24	15	6
July.....	142	26	40	5
August.....	110	28	28	5
September.....	93	17	29	1
October.....	107	11	12	8
November.....	104	37	6	4
December.....	9	44	14	3
Total.....	1,156	353	213	68

*Summary of Public Service.**Police Report for Nine Months from April 1 to December 31, 1888.*

ARRESTS.

Male.....	4,524	Colored.....	90
Female.....	291	Able to read.....	4,787
Married.....	1,282	Unable to read.....	28
Single.....	3,533		
White.....	4,716	Total.....	4,815

AGES.

Under ten years of age.....	7	From forty to fifty.....	651
From ten to twenty.....	391	From fifty to sixty.....	284
From twenty to thirty.....	2,061	From sixty and over.....	63
From thirty to forty.....	1,358	Total.....	4,815

OFFENSES—STATE.

Abduction.....	1	Attempt to provoke breach of peace.....	7
Adultery.....	5	Carrying concealed weapons.....	2
Assault.....	32	Assault with attempt to rape.....	1
Assault and battery.....	192	Assault with dangerous weapon.....	9
"Con men".....	2	Assault with attempt to rob.....	3
Attempted larceny.....	4	Cruelty to animals.....	7
Burglary.....	32	Attempted burglary.....	1
Bastardy.....	12	Disposing of mortgaged property.....	6
Defrauding hotel.....	1	Escaping from work house.....	2
Dealing faro.....	1	Destroying property.....	11
Embezzlement.....	17	Keeping houses of ill-fame.....	10
Forgery.....	14	Larceny from the person.....	15
Grand larceny.....	51	Fugitive from justice.....	5
Highway robbery.....	13	Incorrigible conduct.....	7
Horse stealing.....	8	Maliciously injuring property.....	3
Kidnapping.....	1	Moving stolen property.....	1
Murder.....	4	Murder, suspected of.....	2
Perjury.....	1	Obtaining money under false pretense.....	4
Petit larceny.....	303	Obtaining board by false pretense.....	1
Rape.....	1	Obtaining property by false pretense.....	2
Resisting officer.....	1	Obtaining signatures by false pretense.....	4
Robbery.....	2	Residing in houses of ill-fame.....	8
Wife beating.....	2	Violating Sunday law.....	1
Threats to kill.....	3	Violating election law.....	1
Receiving stolen property.....	7		
Women in mens' apparel.....	1	Total.....	829

OFFENSES—CITY.

Abusive language.....	26	Careless and reckless driving.....	12
Bench warrants.....	1	Lewd and indecent conduct.....	130
Peace warrants.....	5	Charge not made.....	10
Disorderly conduct.....	612	Found in disorderly house.....	10
Drunkenness.....	2,138	Indecent exposure of the person.....	10
Fornication.....	12	Indecent assault.....	1
Fast driving.....	24	Insulting and indecent conduct.....	1
Gambling.....	46	Insulting language.....	1
Vagrancy.....	629	Occupying rooms for purposes of prostitution.....	15
Obscene literature.....	1	Selling liquor without license.....	53
Ran away from home.....	2	Keeping disorderly house.....	2
Obstructing street.....	12	Keeping gambling rooms.....	1
Lewd language.....	5	Violating market ordinance.....	3
Violating bathing ordinance.....	4	" " nuisance ".....	7
" " billiard ".....	3	" " pedlers ".....	7
" " building ".....	36	" " park ".....	18
" " cab and hack ".....	3	" " pound ".....	7
" " dog ".....	19	" " sidewalk ".....	33
" " license ".....	14	" " street ".....	24
" " express ".....	3	" " water ".....	5
" " fire arms ".....	2	Visiting houses of ill-fame.....	98
" " health ".....	36		
" " pawnbrokers' ordinance.....	1	Total.....	4,815
" " liquor ordinance.....	1		
Total city offenses, 3,986.		Total city and state offenses, 4,815.	

NATIVITY.

Australia.....	2	Poland.....	10
Austria.....	8	Prussia.....	4
Bavaria.....	1	Russia.....	31
Bohemia.....	29	Roumania.....	8
Canada.....	170	Scotland.....	46
Denmark.....	36	Spain.....	1
England.....	110	Sweden.....	548
Finland.....	31	Switzerland.....	3
France.....	23	Turkey.....	1
Germany.....	240	United States (white).....	2,747
Holland.....	4	United States (colored).....	99
Hungary.....	5	Wales.....	1
Italy.....	10		
Ireland.....	347	Total.....	4,815
Norway.....	300		

OCCUPATIONS.

Architects.....	3	Bell boys.....	2
Actors.....	2	Blacksmiths.....	39
Artists.....	5	Boarding house keepers.....	1
Agents.....	21	Billiard hall keepers.....	1
Auctioneers.....	4	Boilermakers.....	13
Bakers.....	2	Bookkeepers.....	26
Bankers.....	2	Bootblacks.....	26
Barbers.....	59	Brakemen.....	5
Bartenders.....	35	Bricklayers.....	20
Brewers.....	3	Builders.....	18

Butchers.....	51	Mechanics.....	23
Cabinetmakers.....	7	Merchants.....	68
Canvassers.....	2	Milk pedlers.....	2
Capitalists.....	2	Milliners.....	3
Car builders.....	3	Millers.....	30
Carriage makers.....	3	Miners.....	2
Carpenters.....	169	Molders.....	33
Chairvoyants.....	1	Millwrights.....	2
Carvers.....	2	Musicians.....	8
Cattle dealers.....	1	Ministers.....	1
Chemists.....	1	News agents.....	3
Cigarmakers.....	22	Newsboys.....	12
Clerks.....	69	Nurses.....	2
Collectors.....	2	Operators.....	4
Commercialmen.....	3	Painters.....	78
Coachmen.....	3	Paper hangers.....	11
Confectioners.....	7	Pattern makers.....	1
Contractors.....	20	Pedlers.....	46
Cooks.....	67	Plasterers.....	14
Coopers.....	32	Plumbers.....	21
Cowboys.....	2	Porters.....	6
Dentists.....	2	Printers.....	44
Doctors.....	8	Private watchmen.....	2
Dairymen.....	2	Prostitutes.....	5
Draymen.....	2	Railroad men.....	170
Druggists.....	10	Rag pickers.....	2
Dressmakers.....	13	Real estate men.....	41
Editors.....	3	Reporters.....	1
Electrician.....	1	Restaurant keepers.....	5
Employment agents.....	1	Roofers.....	1
Engineers.....	33	Salesmen.....	29
Engravers.....	1	Saloon-keepers.....	46
Errand boys.....	4	Saw-filers.....	5
Ex-police.....	3	Sailors.....	8
Ex-detectives.....	4	Scavengers.....	10
Farmers.....	69	School boys.....	76
Finishers.....	5	School girls.....	3
Firemen.....	4	Seamstresses.....	10
Flour packers.....	2	Servants.....	3
Foremen.....	2	Second-hand dealers.....	2
Grocers.....	19	Shoemakers.....	25
Hatters.....	4	Showmen.....	2
Hackmen.....	27	Soldiers.....	3
Harnessmakers.....	9	Steamfitters.....	5
Horsemen.....	10	Stone cutters.....	27
Horseshoers.....	10	Stone masons.....	20
Hotel keepers.....	17	Students.....	3
Housekeepers.....	108	Surveyors.....	1
Housework.....	25	Switchmen.....	10
House movers.....	3	Tanners.....	2
Ice dealers.....	3	Tailors.....	51
Janitors.....	4	Teachers.....	1
Jewelers.....	3	Teamsters.....	62
Junk dealers.....	2	Theatrical people.....	2
Laborers.....	2,422	Tinsmiths.....	10
Laundresses.....	4	Trunkmakers.....	1
Lathers.....	3	Turners.....	2
Laundrymen.....	1	Upholsterers.....	6
Lawyers.....	6	Wagonmakers.....	5
Liverymen.....	4	Waiters.....	32
Lumbermen.....	22	Washerwomen.....	3
Machinists.....	36	Watchmakers.....	4
Managers.....	1	Weavers.....	1
Manufacturers.....	9	Well diggers.....	4
Marble cutters.....	4		
Masons.....	4	Total.....	4,815

HOW DISPOSED OF.

Appealed.....	7	Dismissed and discharged.....	639
Bail forfeited.....	10	Bound over to keep the peace.....	5
Bench warrants.....	4	Comitted to county jail.....	40
Escaped.....	1	Delivered to sheriff.....	1
Fined.....	2,042	Remanded to authorities abroad.....	11
Sentence suspended.....	522	Restored to parents.....	2
Sent to workhouse.....	1,228	Sent to reform school.....	28
Sent to hospital.....	1		
Bound over to grand jury.....	274	Total.....	4,815

Miscellaneous Service.*Nine Months, April 1, 1888, to January 1, 1889.*

Accidents reported.....	146	Nuisances and dead animals reported..	382
Buildings secured, being found open...	131	Packages stolen; property recovered..	3
Burglars frustrated.....	23	Runaway horses overtaken and stop'd.	65
Dead bodies taken to morgue.....	45	Sick and injured persons taken home..	73
Defective sidewalks reported.....	256	Sick and injured persons taken to h'spt'l	87
Destitute persons cared for.....	6	Sick and injured persons taken to station and cared for.....	26
Disturbances suppressed.....	10	Stray teams cared for.....	34
Fire alarms given.....	208	Street lamps reported broken.....	23
Fires attended.....	42	Street lamps reported not lighted.....	908
Insane persons cared for.....	68	Stray horses taken up.....	426
Intoxicated persons assisted home.....	5	Suicides reported.....	12
Lodgers accommodated.....	2,604	Stray cows.....	15
Lost children taken to parents.....	165	Violation of building ordinance rep't'd.	3
Lost children taken to station.....	141		
Meals furnished prisoners and lodgers.	3,145		

Summary of Police Service.*Police Report for Year Ending December 31, 1889.***ARRESTS.**

Male.....	5,643	Colored.....	121
Female.....	489	Able to read.....	6,129
Married.....	1,855	Unable to read.....	3
Single.....	4,277		
White.....	6,011	Whole number of arrests.....	6,132

AGES.

Under ten years of age.....	15	From forty to fifty.....	886
From ten to twenty.....	585	From fifty to sixty.....	330
From twenty to thirty.....	2,330	Sixty and over.....	77
From thirty to forty.....	1,909	Total.....	6,132

OFFENSES—STATE.

Abduction.....	3	Obtaining property by false pret'nse..	3
Adultery.....	8	Obt'ning signat'ures by false pret'nse..	1
Assault.....	32	Passing counterfeit money.....	3
Assault and battery.....	239	Perjury.....	1
Assault with intent to rob.....	1	Petit larceny.....	291
Attempted breach of peace.....	2	Possessing obscene pictures.....	1
Bastardy.....	30	Ran away from home.....	1
Bigamy.....	1	Receiving stolen property.....	3
Blackmail.....	1	Residing in house of ill fame.....	12
Burglary.....	30	Rioting.....	5
Burglary, attempted.....	10	Robbery.....	2
Bribery.....	1	Subordination of perjury.....	1
Carrying concealed weapons.....	1	Seduction.....	1
Conspiracy.....	3	Selling tobacco to minors.....	3
Contempt of court.....	10	Selling liquor to minors.....	1
Coercion.....	1	Selling obscene pictures.....	1
Cruelty to animals.....	14	Violating malitia law.....	1
Cutting timber.....	1	Violating fish law.....	23
Cruelty to children.....	1	Disposing of and concealing mortg'd property.....	11
Criminal libel.....	1	Violating liquor law.....	1
Defrauding hotel.....	4	Violating railroad law.....	4
Destroying property.....	17	Violating estray law.....	1
Embezzlement.....	20	Violating game law.....	6
Entering house forcibly.....	1	Violating dental law.....	1
Exhibiting obscene pictures.....	1	Using false weights.....	1
Forgery.....	51	Obstructing officer.....	1
Fugitive from justice.....	5	Non-support of family.....	10
Grand larceny.....	104	Murder.....	1
Highway robbery.....	1	Mortgaging another's property.....	1
Held as witness.....	1	Malicious trespass.....	1
Horse stealing.....	2	Men in female attire.....	1
Incorrigible conduct.....	29	Keeping house of ill fame.....	150
Keeping opium joint.....	1	Maliciously injuring property.....	10
Kidnapping.....	1		
Opening U. S. mail.....	1	Total.....	1,098
Obtaining money by false pretense	3		

OFFENSES—CITY.

Violating firearms ordinance.....	21	Careless and reckless driving.....	19
“ fire “.....	12	Common prostitute.....	26
“ bathing “.....	19	Charge not made.....	4
“ building “.....	30	Disorderly conduct.....	840
“ cab and hack “.....	2	Drunkenness.....	2,558
“ dog “.....	21	Fast driving.....	57
“ employment “.....	2	Fornication.....	73

Violating express ordinance.....	1	Gambling.....	41
" pawubrokers ".....	6	Allowing prostitutes to resort to his	
" health ".....	65	saloon.....	1
" liquor ".....	114	Habitual drunkard.....	3
" license ".....	21	Lewd and indecent conduct.....	19
" peddlers ".....	17	Indecent assault.....	3
" park ".....	33	Indecent exposure of the person.....	17
" plumbing ".....	4	Insulting and profane language.....	1
" pound ".....	8	Keeping disorderly house.....	1
" railroad ".....	27	Keeping assignation house.....	1
" sidewalk ".....	8	Keeping gambling rooms.....	2
" street ".....	61	Keeping gambling device.....	3
" water ".....	3	Lewd language.....	2
" Sund'y liq'or ".....	3	Obstructing street.....	19
Found in house of ill-fame.....	154	Selling liquor without license.....	11
Abusive language.....	21	Suspicious persons.....	5
Breaking the Sabbath.....	9	Vagrancy.....	656
Bench warrants.....	4		
Peace warrants.....	5	Total.....	5,034
Total city and state offenses.....			6,132

NATIVITY OF OFFENDERS.

Australia.....	3	New Brunswick.....	5
Belgium.....	3	Norway.....	523
Bohemia.....	26	Nova Scotia.....	2
Canada.....	236	Poland.....	13
China.....	1	Russia.....	31
Denmark.....	40	Roumania.....	4
England.....	136	Scotland.....	46
Finland.....	18	South America.....	2
France.....	25	Spain.....	6
Germany.....	319	Sweden.....	704
Greece.....	4	Switzerland.....	4
Holland.....	8	Turkey.....	1
Hungary.....	1	United States (white).....	3,411
Ireland.....	407	United States (colored).....	121
Italy.....	18	Wales.....	1
Mexico.....	2		
Newfoundland.....	1	Total.....	6,132

OCCUPATION.

Artists.....	5	Engineers.....	55
Actors.....	5	Errand boys.....	8
Actresses.....	1	Expressmen.....	18
Architects.....	4	Farmers.....	66
Agents.....	46	Finishers.....	9
Auctioneers.....	3	Firemen.....	7
Bakers.....	29	Florists.....	2
Barbers.....	63	Foremen.....	4
Bartenders.....	40	Fortune tellers.....	3
Bellboys.....	3	Fuel dealers.....	5
Blacksmiths.....	55	Gamblers.....	2
Boilermakers.....	23	Gardeners.....	6
Billposters.....	4	Gasfitters.....	7
Bookbinders.....	2	Grocers.....	17
Bookkeepers.....	19	Hackmen.....	12
Bootblacks.....	22	Harnessmakers.....	11
Bricklayers.....	29	Horsemen.....	8
Brewers.....	5	Health inspectors.....	1
Builders.....	11	Hotelkeepers.....	14
Butchers.....	60	Hotel runners.....	1
Cabinetmakers.....	10	Housekeepers.....	175
Capitalists.....	5	Housework.....	180
Cardrivers.....	4	Housemovers.....	4
Carriage makers.....	3	Ice dealers.....	1
Carpenters.....	170	Janitors.....	8
Cattle dealers.....	2	Laborers.....	2,648
Cigarmakers.....	23	Laundresses.....	9
Clerks.....	141	Laundrymen.....	3
Commercial travelers.....	7	Lawyers.....	32
Commission merchant.....	4	Liverymen.....	9
Coachmen.....	7	Lumbermen.....	47
Conductors.....	1	Machinists.....	45
Confectioners.....	9	Manufacturers.....	1
Contractors.....	48	Mail carrier.....	2
Coopers.....	50	Marble cutters.....	2
Cooks.....	96	Masons.....	20
Doctors.....	17	Mechanics.....	34
Druggists.....	9	Merchants.....	59
Draymen.....	6	Mediums.....	1
Dressmakers.....	7	Milk peddlers.....	7
Editors.....	1	Millers.....	44
Ex-detectives.....	2	Ministers.....	2
Ex-police.....	4	Molders.....	42
Employment agents.....	3	Musicians.....	9

Miners.....	5	Socialists.....	1
Newsagents.....	2	Seamstresses.....	30
Newsboys.....	23	Servants.....	6
Nurses.....	5	Secondhand dealers.....	4
Operators.....	4	Shoemakers.....	48
Painters.....	114	Skaters.....	2
Paperhangers.....	15	Soldiers.....	7
Pawnbrokers.....	2	Steamfitters.....	9
Peddlers.....	51	Stonemasons.....	19
Plasterers.....	26	Students.....	18
Plumbers.....	45	Tanners.....	3
Porters.....	9	Tailors.....	7
Printers.....	57	Teachers.....	57
Prostitutes.....	30	Teamsters.....	4
Railroad men.....	194	Tinsmiths.....	105
Real estate men.....	30	Undertakers.....	19
Reporters.....	8	Veterinary surgeons.....	1
Restaurant keepers.....	7	Waiters.....	2
Roofers.....	3	Washerwomen.....	71
Salesmen.....	32	Watchmen.....	7
Saloonkeepers.....	108	Watchmakers.....	1
Sawfilers.....	2	Weavers.....	9
Sawyers.....	5	Well-diggers.....	3
Scalers.....	2		
Scavengers.....	8		
School boys.....	202	Total.....	6,132
School girls.....	2		

HOW DISPOSED OF.

Bail forfeited.....	22	Remanded to authorities abroad.....	4
Bound over to grand jury.....	254	Sent to workhouse.....	2,015
Bench warrants.....	1	Still pending.....	5
Bound over to keep peace.....	1	Sentence suspended.....	807
Taken to higher court.....	12	Sent to reform school.....	50
Committed to county jail.....	18	Sent to insane asylum.....	1
United States commissioner.....	3	Dismissed and discharged.....	778
Held in lockup.....	1		
Fined in municipal court.....	2,160	Total.....	6,132

Miscellaneous Service.

January 1st, 1889, to January 1st, 1890.

Accidents reported.....	107	Meals furnished prisoners and lodgers.....	4,528
Buildings secured, being found open.....	116	Nuisances and dead animals reported.....	886
Burglars frustrated.....	19	Packages stolen; property recovered.....	9
Dead bodies taken to morgue.....	43	Runaway horses overtaken and stopd.....	59
Defective sidewalks reported.....	399	Sick and injured persons taken home.....	50
Dangerous places reported.....	12	Sick and injured persons t'kn to hsp'l.....	93
Destitute persons cared for.....	33	Sick and injured persons taken to station and cared for.....	40
Disturbances suppressed.....	45	Stray teams cared for.....	60
False alarms.....	55	Street lamps reported broken.....	6
Fire alarms given.....	261	Street lamps reported not lighted.....	1,718
Fires attended.....	63	Stray horses taken up.....	506
Insane persons cared for.....	84	Suicides reported.....	12
Intoxicated persons assisted home.....	8	Violation of building ordinance rep'd.....	5
Lodgers accommodated.....	7,955	Stray mule.....	1
Lost children taken to parents.....	325	Stray cows.....	11
Lost children taken to station.....	140		

W. M. Brackett, Esq., Superintendent of Police:

SIR—I herewith submit my report for the nine months ending December 31, 1888, together with the annual report for the year ending December 31, 1889, with tabulated statements, etc.

For the year 1888 there were two hundred and forty-five saloon licenses issued (245), making a revenue of two hundred and forty-five thousand (245,000) dollars.

There were eight hundred sixty-six (866) general licenses, with a revenue of \$15,845.

Total revenue from all licenses, \$260,845.

There were twenty-seven complaints against persons selling liquor without license, which were disposed of by the district court after indictment by the grand jury.

During the year there was \$163.55 used by police officers in securing evidence against persons selling liquor without license.

For the year ending December 31, 1889, show a remarkable difference from

previous years in the revenue and disposing of the liquor violations, which is due to an ordinance passed by the city council (which I endeavored to have at the time of the high license law coming into effect July 1, 1887, but was unable to get such an ordinance through the city council, so I was compelled to depend on the district court, which proved very unsatisfactory owing to so much delay in coming to trial) during the early part of the year giving the municipal court jurisdiction to try and dispose of all such violations; also to the discipline and efficiency the police department has been subjected to during the last year passed and the quick and rigid penalties imposed by the municipal court, which has been the means of reducing such violations to a minimum never before attained.

For the year 1889-90 there were two hundred and forty-nine (249) saloon licenses issued with a revenue of \$249,000.

There were eight hundred and thirty-six (836) general licenses issued up to December 31, 1889, with a revenue of \$17,170 47.

Total number of all licenses, ten hundred eighty-five (1085).

Total revenue from all licenses, \$266,170.47.

The following tables show the number of violations of various laws and ordinances:

Selling liquor without license.....	17
Selling liquor on Sunday.....	94
Selling liquor to minors.....	3
Violations of express and hack ordinance.....	11
" employment ordinance.....	2
" pedlers ordinance.....	4
" fortune tellers ordinance.....	4
Total.....	135

Out of the number violating the liquor laws and ordinances there were:

Held to grand jury.....	10
Fined in municipal court.....	60
Dismissed.....	38
Sent to workhouse.....	2
Supreme court.....	2
Sentence suspended.....	2
Total.....	114

There were \$3,051.35 fines collected in the municipal court for violations of the license ordinance, of which \$2,720 were for selling liquor on Sunday.

NOTE.—Fortune tellers ordinance declared unconstitutional by the municipal court.

During the year there was used by police officers and others in securing evidence against liquor violations, \$327.40, (said amount includes all special detective duty in looking up various violations).

For the past few years there has been considerable trouble in licensing wagon pedlers, so I caused large tin numbers with the words "Wagon Pedler" and number of their license to be painted and fastened on their wagons, which overcome all previous trouble. I also had an application to the city comptroller, the ordinance regulating the charges of hackmen, etc., to be printed in pamphlet form and to be placed in all licensed hacks with name of license and number of license; also a small metallic badge for each driver of hack and cab to be worn while acting as such driver.

I would also recommend, in view of the recent decision of the supreme court, an ordinance specifically defining what constitutes a public drayman or expressman, as the present ordinance is so indefinite as to make it impossible to tell who shall or who shall not pay a license.

In conclusion I would say there never were in the history of the city as little violations of selling liquor without a license (or "blind pigs") as there have been the last year or at the present time.

Very respectfully,

ENOCH RAY,

License Inspector.

MINNEAPOLIS, MINN., January 14, 1890.

W. M. Brackett, Superintendent of Police:

SIR:—I hereby present to you a resume of my work as street and sidewalk inspector and as special detective for the city attorney for the year 1889.

As sidewalk inspector I have reported sixteen hundred (1,600) defective sidewalks and had the same repaired by the street commissioners of the different wards of the city.

The amount of lumber used to make the repairs was one hundred and thirty-two thousand feet (132,000) amounting to about \$1,900.

The repairs to stone sidewalks amounted to about \$500.

I have enforced faithfully all street ordinances and brought all violations before the court. I made the following arrests:

Violations street ordinances.....	23
Violations sidewalk ordinances.....	4
Leaving horse unhitched.....	3
Fast driving.....	2
Larceny.....	2
Disorderly.....	2
Assault and battery.....	1
Drunkenness.....	1
Violation health ordinance.....	1
Total.....	39

I have assisted on several occasions, officers on their beats when in need of such assistance. I have looked after all complaints made to me by night officers, reports about violations of ordinances by parties, they could not reach; also after numerous complaints made by private parties against neighbors and others. In the legal work I have investigated and adjusted numerous claims against the city. I have also secured evidence in the damage suits against the city in the following cases, viz:

E. Hall vs. City.	J. Berquest vs. City.
Cyrus Hall vs. City.	J. Fitzgibbons vs. City.
E. M. Gallagher vs. City.	Alice Barry vs. City.
E. Kent vs. City.	T. W. Shonewalder vs. City.
Stephen Harden vs. City.	Harry Tuttle vs. City.
J. T. Larson vs. City.	Harry Sullivan vs. City.
St. Anthony Water Power Co. vs City.	E. L. Larson vs. City.
St. P. M. & M. R. R. Co., Como avenue cross- ing vs. City.	Nicholas Henker vs. City.
St. P., M. & M. R. R. Co., 22d avenue NE crossing vs. City.	M. J. Hemperly vs. City.
St. P., M. & M. R. R. Co., 19th avenue NE crossing vs. City.	Mary Collins vs. City.
David Keyes vs. City.	Maria Olson vs. City.
	Peter Peterson vs. City.
	Levy Patterson vs. City.
	Josephine White vs. City Officers.

I have also assisted the building inspector and the health inspector by reporting violations of their laws.

I am, respectfully yours,

F. DE HARVEN,

Police Officer and Street and Sidewalk Inspector.

Roster of Police Force, City of Minneapolis.

NAME.	RANK.	NATIVITY.	FIRST APPOINTED.
Brackett, W. M.	Superintendent.	United States.	January 8, 1889.
Bosworth, W. W.	Captain	United States.	May 12, 1875.
Buefening, M.	"	Germany	May 22, 1875.
Ness, Louis.	"	Norway	April 18, 1883.
Hein, Jacob	"	Germany	June 19, 1878.
Day Dan'l A.	"	United States.	April 30, 1886.
Walton, Swan	Lieutenant.	Sweden.	May 9, 1878.
Bean, J. S. J.	"	United States.	April 16, 1884.
Nelson, Thomas.	"	Norway	May 1, 1880.
Coskran, Thos.	"	Ireland	April 16, 1884.
Kennedy, Pat'k.	Sergeant.	Ireland	April 11, 1876.
Norman, Jno.	"	Sweden	April 11, 1876.
Kennedy, Jno.	"	Ireland	April 24, 1885.
Dunn, Wm.	"	Ireland	May 18, 1887.
Leonard, J. H.	"	New Brunswick	June 14, 1882.
Pierce, Washington.	"	United States.	April 16, 1884.
Allen, James.	"	Canada	April 8, 1879.
Volk, Aug.	"	United States.	April 18, 1883.
Foster, W. S.	"	United States.	April 24, 1885.
Fox, Patrick.	"	Ireland	April 14, 1882.
Brueshaber, W.	"	United States.	April 16, 1883.
Kirkham, S. A.	"	United States.	May 1, 1884; off 19 mos.
Gustafson, C. V.	"	Sweden.	April 18, 1883.
Hankinson, J. W.	Detailed inspector.	United States	May 12, 1875.
Howard, James.	"	Ireland	June 14, 1882.
Lawrence, Joseph.	"	United States	April 18, 1883.
Doyle, Jas. G.	"	Canada.	August 1, 1886.
George, Fred. A.	"	United States	April 30, 1886.
Mallon, M. J.	"	Ireland	October 1, 1889.
Hoy, Jno. P.	"	United States.	April 15, 1886; off 10 mos.
Ray, Enoch.	Detailed Lis. Inspr.	United States	April 24, 1885.
Byrnes, Jno.	" Ct. officer.	Ireland	April 11, 1877; off 1 year.
Campbell, J. C.	"	United States	April 6, 1884.
Megaarden, P. T.	"	Norway	April 30, 1886.
Coffin, Fred. E.	Mounted sergeant.	United States.	April 18, 1883.
Deveraux, M.	patrolmen.	Canada.	April 18, 1883.
Guimont, M.	"	Canada.	April 16, 1884.
Pickett, D. E.	"	United States	April 30, 1886.
Mathieson, H.	"	Scotland	April 30, 1886.
Smeby, M.	"	Norway	April 30, 1886.
Hoban, E. W.	"	United States.	August 1, 1886.
Linehan, P. W.	"	Ireland	November 1, 1887.
Fay, J. C.	"	Ireland	April 30, 1886.
Getchell, H. L.	"	United States	April 24, 1885.
Almour, Wm.	"	Canada.	January 6, 1887.
Griffin, Harry	"	United States	July 30, 1886.
Shean, James.	"	United States.	June 30, 1887.
Huntton, N. B.	"	United States.	November 1, 1887.
Shephard, Fred. C.	"	United States.	April, 1884; off 2 years.
Williamson, F. J.	"	United States	June 30, 1887.
Thompson, D. L.	"	Canada.	February 2, 1889.
Butler, James.	Patrolman.	Ireland	April 10, 1877.
Ryan, Michael.	"	Ireland.	April 9, 1878; off 1 year.
Daly, Wm.	Detailed jailor.	Ireland.	July 5, 1876; off 1 year.
Gardner, J. M.	Patrolman	Sweden	February 20, 1880.
Cronin, Jno.	"	United states	April 11, 1882.
Mauren, Nic.	"	Prussia	June 14, 1882.
Kennedy, A. J.	"	United States	June 14, 1882.
Bradley, Peter.	Detailed Jailor.	Ireland	June 14, 1882.
Brudigan, Henry	Patrolman	Germany.	June 14, 1882.
Brady, Mack.	"	United States	June 14, 1882.
Shelly, O. M.	"	Norway	September 1, 1882.
Needham, A. B.	Detailed jailor.	United States	January 1, 1883.
Kennedy, Mike.	Patrolman	Ireland.	April 18, 1883.
Mouso Paul.	"	United States	April 18, 1883.
McNamara, Thos.	"	Ireland.	April 18, 1883.
Ensch, Jno.	Detailed driver.	Germany.	April 18, 1883.
Gorey, Jno.	Patrolman	United States	April 18, 1883.
Burli, Hans.	"	Norway	April 11, 1882.
Hurley, Patrick.	"	Canada.	April 11, 1882.
Schroeder, Jno.	"	Germany	April 11, 1882.
Boisclair, Oliver.	"	Canada.	April 16, 1884.
Powers, G. M.	"	United States.	April 16, 1884.
Faurskow, Holgar.	"	Sweden	April 16, 1884.
Heilrich, Chas.	"	United States	April 16, 1884.
Brault, J. P.	"	Canada	April 16, 1884.
Martinson, Peter	"	Sweden	April 23, 1884.
Wold, J. E.	"	Norway	April 23, 1884.
Van Riekeley, J.	"	Prussia	April 16, 1883.

Roster of Police Force—Continued.

NAME.	RANK.	NATIVITY.	FIRST APPOINTED.
Rice, John.....	Patrolman.....	United States.....	April 16, 1883.
Reece, Wm. J.....	".....	United States.....	November 5, 1884.
Grattan, James.....	".....	Ireland.....	April 20, 1884.
Swanson, N. P.....	".....	Sweden.....	November 19, 1884.
Moore, C. H.....	Detailed driver.....	United States.....	April 24, 1885.
Mealey, Michael.....	Patrolmen.....	United States.....	April 24, 1885.
Moshelle, J. H.....	".....	Germany.....	April 24, 1885.
Kvittum, J. V.....	".....	Norway.....	April 24, 1885.
Collins, Thos. L.....	".....	United States.....	April 24, 1885.
Hurley, P. J.....	".....	Ireland.....	Aug. 20, 1884, off 1 year.
White, B. S.....	".....	United States.....	April 24, 1885.
McQuaid, Jno.....	".....	New Brunswick.....	April 30, 1886.
Mingo, Jno.....	".....	Germany.....	April 30, 1886.
Shafar, Thos.....	".....	Austria.....	April 30, 1886.
Stewart, Jno.....	".....	Denmark.....	April 30, 1886.
Porcher, C. S.....	".....	United States.....	April 30, 1886.
Zalusky, Frank.....	".....	United States.....	April 30, 1886.
Zimkowski, Jno.....	".....	Poland.....	April 30, 1886.
Czaja, Albert.....	".....	Prussia.....	April 30, 1886.
Wold, Odin.....	".....	Norway.....	April 30, 1886.
Watkins, O. H.....	".....	United States.....	April 30, 1886.
Maloney, Jno.....	".....	United States.....	April 30, 1886.
Johnson, Geo. J.....	".....	Norway.....	April 30, 1886.
West, Thos.....	".....	United States.....	April 30, 1886.
Gulden, Robt.....	".....	Germany.....	April 30, 1886.
Morrissey, Jno.....	".....	United States.....	April 30, 1886.
Knudson, Louis.....	".....	Norway.....	April 30, 1886.
Norack, J. C.....	".....	United States.....	April 30, 1886.
DeHarven, F.....	".....	France.....	April 30, 1886.
Zimmam, Aug.....	Detailed jailor.....	Germany.....	April 30, 1886.
Zimmerman, S.....	".....	Switzerland.....	April 30, 1886.
Rauen, Nic.....	Detailed jailor.....	Germany.....	July 30, 1886.
Bostwick, R. L.....	" driver.....	Canada.....	April 30, 1886.
Hoyt, Albert.....	".....	United States.....	April 30, 1886.
Stavalo, Jno.....	Patrolman.....	Norway.....	July 30, 1886.
Von Trieb, Matt.....	".....	United States.....	July 30, 1886.
McNulty, Simon.....	".....	Ireland.....	July 30, 1886.
Sieverling, M.....	".....	Germany.....	July 30, 1886.
Delano, L. G.....	".....	United States.....	July 30, 1886.
Rievieri, Geo.....	".....	Canada.....	July 30, 1886.
Mayo, Geo.....	".....	United States.....	July 30, 1886.
Clukev, Frank.....	".....	United States.....	July 30, 1886.
McLaughlin, Peter.....	Detailed driver.....	United States.....	December 3, 1886.
Schwab, Jno. B.....	" court officer.....	Germany.....	March 1, 1887.
Quealey, P. J.....	Patrolman.....	Ireland.....	May 18, 1887.
Courtney, Jno.....	".....	Ireland.....	May 18, 1887.
Hannon, John.....	".....	Ireland.....	May 18, 1887.
Sullivan, Jas. F.....	".....	Ireland.....	May 18, 1887.
McNulty, Edward.....	".....	Ireland.....	May 18, 1887.
Yost, Jacob.....	".....	Germany.....	May 18, 1887.
McKenna, Jno.....	".....	Ireland.....	May 18, 1887.
Bacon, B. W.....	".....	United States.....	May 18, 1887.
Rankins, Ambrose.....	".....	United States.....	May 18, 1887.
Collins, Richard J.....	Detailed driver.....	Canada.....	June 28, 1887.
Fox, Wm.....	Patrolman.....	Ireland.....	June 30, 1887.
Galvan, John.....	".....	United States.....	June 30, 1887.
Derrick, D. H.....	".....	United States.....	June 28, 1887.
Lenihan, M.....	".....	Ireland.....	June 30, 1887.
Weimelt, Henry.....	".....	United States.....	June 30, 1887.
Garvin, Thos. H.....	".....	United States.....	June 30, 1887.
Bean, A. L.....	".....	United States.....	November 1, 1887.
Hasey, Elijah.....	".....	United States.....	November 1, 1887.
Fox, Peter.....	".....	United States.....	November 1, 1887.
Cronin, M.....	".....	United States.....	November 1, 1887.
Ryan, J. M.....	".....	Ireland.....	November 1, 1887.
Molan, Jno.....	".....	United States.....	November 1, 1887.
Johnson, A. P.....	".....	Sweden.....	November 1, 1887.
Russell, Thos.....	".....	United States.....	November 1, 1887.
Kelley, Thos. J.....	".....	Ireland.....	April, 1883; off 3 years
Smith, Nic.....	".....	United States.....	April 30, 1886; off 2 years
Provost, Amos.....	".....	Canada.....	May 1, 1886; off 2 years.
Tedman, H. G.....	".....	United States.....	February 2, 1889.
Wold, Aug.....	".....	Norway.....	February 2, 1889.
Michaud, Henry.....	".....	United States.....	February 2, 1889.
McLeod, M. R.....	".....	Nova Scotia.....	February 2, 1889.
Hicks, Oscar.....	".....	Canada.....	February 2, 1889.
Gordon, E. P.....	".....	United States.....	February 2, 1889.
Hahn, W. H.....	".....	United States.....	February 2, 1889.
Johnson, F. W.....	".....	United States.....	February 2, 1889.

Roster of Police Force—Continued.

NAME.	RANK.	NATIVITY.	FIRST APPOINTED.
McNiven, D. J.	Patrolman	Nova Scotia	February 2, 1889.
Dahlgren, Jno	"	Sweden	February 4, 1889.
Arnold, A. C.	"	United States	February 2, 1889.
Gambold, J. S.	"	United States	February 2, 1889.
Wiley, Oscar H.	"	United States	February 2, 1889.
Brown, C. E.	"	United States	February 4, 1889.
Ward, Jno. A.	"	United States	February 18, 1889.
Hatch, C. M. B.	"	United States	February 18, 1889.
Farrell, Leroy	"	United States	February 18, 1889.
Aasgard, K. O.	"	Norway	February 18, 1889.
Bahan, Geo. W.	"	United States	February 20, 1889.
York, Geo. W.	"	United States	February 20, 1889.
Drake, Fred. M.	"	United States	February 20, 1889.
Robinson, Jas. H.	"	New Brunswick	June 1, 1889.
Crich, Jno. G.	"	Canada	June 1, 1889.
Garrish, Howard A.	"	United States	June 1, 1889.
Thorbergsen, T. C.	"	Norway	June 1, 1889.
Erickson, A. G.	"	Sweden	June 1, 1889.
Thompson, Jno. H.	"	Sweden	June 1, 1889.
Kerr, Jno.	"	Canada	June 4, 1889.
Nisted, Wm.	"	Denmark	June 17, 1889.
Tollefson, Iver	"	Norway	June 17, 1889.
Metzger, Chas.	"	United States	June 18, 1889.
Johnson, H. J.	"	United States	June 18, 1889.
Kennedy, R. J.	"	United States	June 18, 1889.
Anderson, Peter	"	Norway	June 18, 1889.
Averill, H. S.	"	United States	August 5, 1889.
Finnegan, W. H.	"	United States	August 1, 1889.
Noren, Aug.	"	Sweden	August 1, 1889.
Plumer, R. A.	"	United States	August 1, 1889.
Rutledge, J. F.	"	United States	August 1, 1889.
Stuart, A. A.	"	United States	August 1, 1889.
Allen, W. F.	"	United States	August 26, 1889.
Lawler, L. H.	"	United States	August 26, 1889.
Howes, Frank H.	"	United States	August 26, 1889.
Malone, W. B.	"	New Brunswick	August 26, 1889.
Trepanier, A. H.	"	United States	August 26, 1889.
Hanson, Lars	"	Denmark	August 26, 1889.
Mason, Chas. L.	"	United States	August 26, 1889.
Havelsrud, O.	"	Norway	August 26, 1889.
Langdon, Robt	"	Norway	August 26, 1889.

ANNUAL REPORT

OF THE

DEPARTMENT OF HEALTH,

OF THE

City of Minneapolis

For the Fiscal Year Ending December 31, 1889.

S. S. KILVINGTON, M. D.,
Chairman and Commissioner of Health.

MINNEAPOLIS :
HARRISON & SMITH, PRINTERS.
1890.

DEPARTMENT OF HEALTH.
CITY OF MINNEAPOLIS.

HON. E. C. BABB, Mayor,
Alderman H. W. BRAZIE, M. D., Alderman J. C. STERLING,
Alderman E. G. POTTER,
S. S. KILVINGTON, M. D., *Chairman and Commissioner of Health.*

EMPLOYES:

CLARIBEL S. BARD, Clerk.

Medical Inspectors:

R. O. BEARD, M. D., H. M. BRACKEN, M. D., W. E. LEONARD, M. D.

Sanitary Inspectors:

E. G. O'DONNELL. F. A. SCHWARTZ, GEO. J. TURNER,
J. S. WOODBURY, J. A. ARNESON, W. H. FOSTER,
F. A. BRIGGS.

Quarantine Hospital:

HERBERT SCOTT, Supt., ABBIE SCOTT, Matron.

Dump Police:

DAVID K. HANSCOME, GEO A KELLY, DUDLEY NEE.

DEPARTMENT OF HEALTH.

MINNEAPOLIS, MINN., January 1, 1890.

To the Honorable Mayor and Common Council of the City of Minneapolis, Minn.

GENTLEMEN—Since the presentation of the last annual report which issued from this office the limits of the municipal year have changed and it becomes necessary that the calendar of health should conform thereto.

Hence this communication, which has been made, in the past, upon the first of April, takes date, under the new law, upon the first of January.

Only nine months have intervened, therefore, since the writer had the honor to invite your attention to the general affairs of this department. In view of this fact, and considering how large a share of this report is statistical in form and that the value of health statistics depends greatly upon the uniformity of the period they cover, he has deemed it wise to include, in the present pages, the earlier months of the year and to preserve, even at the expense of some slight repetition, the annual feature of the returns. Moreover, by the adoption of this plan, he will be enabled to present a more complete picture of the progress which has been made and of the work which has been accomplished under the new regime.

The past year has been an eventful one in the history of the health department of Minneapolis. It has been a very active part of the transition period through which every community must pass in the course of its evolution into a great city,—a period which is always occupied in the slow recognition of its sanitary needs and in the gradual attainment of those sanitary methods which will adequately meet its necessities. The nature of these needs the writer had occasion to emphasize in his communication to your honorable body a year since. How far they have been met, the details of the work done will best tell. How much yet remains undone may be guessed from the urgency of some of the demands which he will have occasion to present to you in the succeeding pages of this report.

The year has witnessed the successful reorganization of the department of health under a special act of the legislature enacted April 22d, 1889.

The new law was responsive to a recognition of the metropolitan proportions to which the city of Minneapolis has grown. The health-laws of the State, adapted to the limited needs of smaller communities, could no longer be accommodated to the wider scope and the peculiar requirements of a large city. The work of the department had become too varied and too complex to be covered by general legislation.

For the fact that our health-interests had been so rapidly brought to the point of this necessity, the preparatory labors of the officials of the old board should receive a very large share of credit. The men, with whom the writer was first associated, whose faithful efforts he has often had occasion to applaud, found their initial duties encumbered by the crudest conditions in the equipment and service of the department. They were appointed to an office the functions of which they had fairly to create. And that they did their work well the results of today testify. When the new department was created—nine months ago—the president of the old board had nothing to regret but that his associates, ex-alderman G. W. Cooley and Dr. C. H. Hunter, were thereby legislated out of office with himself.

Apropos of that event, perhaps it may not be out of time or place for your present commissioner of health to express publicly to your honorable body his appreciation of the confidence which, in contravention of past political usage, dictated his own appointment to an office, created, under the new law, as a substitute for the place he had previously filled, under the general statute, by the courtesy of an opposing administration.

It has not been an easy task to effect the radical changes in the legal machinery and the working methods of the office which this special act has involved. For the co-operation and encouragement in this undertaking which he has received from his colleagues in the department—his honor Mayor E. C. Babb and Aldermen Brazie, Potter and Sterling, of the committee on health and hospitals,—your Commissioner is profoundly grateful.

To those officials who have lent their timely aid in the interpretation and enforcement of the new law,—notably the city attorney and his assistants, the judges and officers of the municipal court, the chief of police and his staff, and the building inspector and his aides—the especial thanks of the department are due.

To the representatives of the press, for the unfailing courtesy and fair spirit in which the health measures of the department have been discussed and usually sustained, its acknowledgments are sincerely proffered.

The efficiency of the city's sanitary service is most justly to be tested by the results epitomized in the following pages. But it may not be amiss for your Commissioner to point especially to the improved *personnel* of the department, to the higher average of training and intelligence in the force and to the gratifying harmony which has attended the conduct of its affairs.

To his entire corps of medical and health inspectors and, in particular, to his acting assistant, Dr. R. O. Beard, he wishes to render, in this public manner, a due share of whatever credit may attach to the department as the fruit of its labors in the year now drawing to a close.

To the careful attention of your honorable body the suggestions which the department will have to offer in the closing paragraphs of this report are respectfully presented.

To the perusal of a considerate public, it desires to commend the facts and figures which are grouped in the following pages in the hope that it will find in them some food for encouragement, for instruction and, perhaps, for reproof.

Respectfully submitted,

S. S. KILVINGTON, M. D.,

Commissioner of Health.

RE-ORGANIZATION.

The health history of Minneapolis, for the first three months of the past year, was embodied in the annual report issued April 1, 1889. This initial period of the year was occupied in completing the work undertaken in the preceding twelve months, in perfecting the records of the office, and in preparing the department for prospective changes in its organization.

The old and cumbersome corps of thirteen ward inspectors was removed and was replaced by a temporary force of five men, chosen for their experience and fidelity, from the former list. In addition two new medical inspectors were added to the service and assigned to quarantine duty.

Upon April 22, 1889, the bill for the re-organization of the department of health of the city of Minneapolis became a law. Under its provisions, the members of the old board of health were retired, and upon April 26 the council proceeded to meet the requirements of the act by the appointment of a commissioner of health, to serve until January 1, 1891. Dr. S. S. Kilvington, the former president of the board and health officer of the city, received the majority of the council votes and was declared the choice of your honorable body. The new department, consisting of the mayor, the members of the committee on health and hospitals, and the newly elected commissioner organized at once for active service.

A competitive examination, upon important sanitary details, was held for the purpose of determining the selection of a new corps of health inspectors. It resulted in the selection of Messrs. F. A. Briggs, E. G. O'Donnell, Wm. Foster, J. A. Arneson, F. A. Schwartz, Geo. J. Turner and J. S. Woodbury. Dr. R. O. Beard was retained in his position as assistant, and Drs. W. E. Leonard and H. M. Bracken were re-appointed to the medical inspectorships. The tried efficiency of Miss C. S. Bard won her deserved retention, also, as clerk of the office.

Alike in the appointment of the commissioner of health and in the make-up of the entire sanitary service, partisan principles were noticeably set aside and a long step was taken toward putting the department upon a

civil service reform basis, a move of which we sincerely trust the future may prove the permanency. There is every reason why the personnel of such a sanitary system as Minneapolis needs should be chosen by a standard of fitness outside of mere party lines. During the past year the superior quality and easier training of the smaller number of health inspectors employed, have been demonstrated by the results of their labors which the following pages will record. The urgent need of a limited but competent corps of medical men in the service requires no emphasis in a city the size of Minneapolis, approaching, as it is, that period of its history when infectious and contagious diseases will tend to become endemic. That combined intelligence, tact and sanitary knowledge, which are the essential qualifications of every health official, can best be secured when the choice is untrammelled, as much as may be, by political considerations; and in no department of a municipal government is it more to be desired that tried and efficient service should constitute a reason for retention in office in the face of all political changes.

It requires a twelve-month, at least, to train any member of such a force to his highest degree of efficiency, and, when he has once mastered the sanitary details pertaining to his office, it is a sacrifice to the public welfare to compass his dismissal, excepting for personal cause.

The special law, under which the department was re-organized, had for its objects not only the improvement of the sanitary service, but also the improvement of the sanitary system with the support of which that service is charged. "The government of the health and the quarantine of the city of Minneapolis" is the other specific purpose of the act. It defines the powers of the department, it widens the scope of its activities, it improves the machinery of its working methods. So important are many of its features to the general public, so difficult of access is it, until its issuance shall be secured in some volume of law reports, so frequent have been the pleas of ignorance regarding its enactment or its provisions, coming alike from the lawyers and the people, that the department has deemed it advisable to publish in these pages some selected portions of the law. As a part of this official report these sections will secure the attention which their chance publication at any other time would not command.

To the merits of this law, as well as to the merits of the force, must be attributed a share of the success which the department has achieved in extending its work along new and previously undeveloped lines.

By virtue of the authority granted the department under this act, it adopted and published in the official paper of the city, on July 16, 1889, a series of rules and regulations covering those minutiae of sanitary control which are not specifically stated in the act itself. For the further information of the public this code will be reproduced as an addendum to the volume in hand. It is in the nature of a revision of the sanitary code, which existed under the old law and was first formulated by the present commissioner in 1887. At the same time it is more concise in statement and more inclusive in detail. Section "22 A" has been added since the revision and governs the holders of, or applicants for books from the public library in whose households contagious disease may exist.

These two instruments, the special law and the rules and regulations, constitute the working weapons of the department and are enforced by action in the Minneapolis court, under a penalty of fine not exceeding one hundred dollars (\$100), nor less than ten dollars (\$10).

The classification followed in these rules may be usefully adopted in our discussion of the several duties of the department. These come under the following heads:

- (1.) Food and Water Inspection.
- (2.) Nuisance and House Inspection.
- (3.) Diseased and Dead Animals.
- (4.) Scavenger Service.
- (5.) Human Contagious Diseases.
- (6.) Deaths.
- (7.) Burials and Disinterments:

To these several interests your attention is earnestly invited.

FOOD AND WATER INSPECTION.

The recent legislation, to which we have already referred, endows this department with authority to enforce all laws relating to the use or sale of poisonous, unwholesome or adulterated foods and directs it to take such measures as may be necessary to preserve the purity of the sources of water-supply.

Minneapolis is to be congratulated that, within the past year, she has materially improved her supply of potable water by the transference of the principal intake to the North Side pumping station. For every progress in this direction a great city should be profoundly thankful. No larger factor in the maintenance of the public health exists than a pure drinking water. The Mississippi river, at this or any other point, can, perhaps, never be regarded as an ideal source and the city may eventually have to look farther for its means of supply; but the change from an intake, lying in the midst of that part of the stream polluted by a large share of the city's sewage, to an intake, situated above and beyond the great avenues of pollution, is a manifest blessing.

By so much as the distribution of the city water to the residences of the people is incomplete, the old problem of well-water supply still remains. The number of wells in use within the city limits is still unfortunately large, for not one in a hundred is situated in a soil which guarantees the quality of its water. This is in no way remarkable when we remember how large a part of the city of Minneapolis is underlain by a gravel drift of from 25 to 150 feet in depth. It is a notable fact that by far the majority of the contagious diseases and deaths occur in those districts which are supplied with well water. It goes without saying that a surface well is constantly liable to infection by the drainage into it of surface impurities or of materials from neighboring cesspools and privy vaults. In many instances the department has ordered the abandonment of grossly polluted wells, and it might go further in this direction could it have at its command the services of a competent chemist. At the same time the department has been disposed to proceed cautiously in this matter, realizing that, until the city water can be brought to the doors of the people, it would be a hardship in many instances to deprive them of the water which, though undesirable in quality, comes from their sole source of supply.

It is a matter for regret that the city cannot indulge in the same measure of self-applause regarding her methods of food inspection. Taking into account all that has been done in this direction by the agencies now at work in the way of the state dairy commission and the local inspectorship of dressed meats, it is still deplorably true that the public of this great city is not adequately protected by any due oversight of articles of food intended for human consumption. Censorship over dressed meats is but a limited affair at the best. The naked eye can do little to detect ill conditions in meat and, while the microscope can do much, it will yield its results only to the trained hand and eye of the microscopist. The dairy commission is doing excellent work, but it has too wide a field to cover to be anything but occasional in its examination of the milk and butter supply of this large community.

Inspection of cattle on the hoof was provided for by the last legislature in the now famous meat inspection law. Acting upon its provisions, the department appointed J. A. G. Richardson as inspector, on April 29th, and for the five months following he conducted regular examinations of animals prior to slaughter. Within this period he inspected 10,477 animals. During this time the law was on trial repeatedly in the courts, which ruled against its constitutionality. On September 30, acting under the counsel of the city attorney, the department suspended the work of inspection on the hoof, pending a decision by the supreme court of the State. Whatever may be the merits of the law from a commercial standpoint, there can be no doubt in the mind of the sanitarian that animals intended for human food should be subjected to rigid inspection before slaughter. There are a number of diseases, and notably the various manifestations of tuberculosis, which affect cattle, the pre-existence of which cannot be determined by an examination of the dressed meat, but which justify the condemnation of the carcass as human food. Whether within or without the limits of the State competent

inspection should determine the physical integrity of cattle before and after they are killed, and a certificate, vouching for its fitness as food, so determined, should accompany the meat wherever it is sent or sold.

Not less important is it that the health of animals supplying milk for human consumption should be determined by periodical examinations, or that such staple articles as butter, lard, sugar, spices, baking powders, etc., should be subjected to careful analysis. Constantly is the department importuned to undertake the details of this duty assigned to it under the law, while it is compelled to decline such service because it has neither the means nor the men at its disposal for so large, though so necessary a task.

Attention is invited to the table of meat inspections included in the statistical pages which follow.

NUISANCE AND HOUSE INSPECTIONS.

In no branch of the service can the progress of the department be more satisfactorily shown than in the abatement of nuisances and the inspection of houses. During 1889, with only seven men at its command, the department has more than trebled the work accomplished, in these lines, by the entire corps of thirteen men employed in 1888. Better machinery, as to the law; better organization, as to the office; and better training and intelligence in the force, are the factors which have entered into this result.

A reference to the comparative tables which follow will prove instructive to the reader. Therein it will be noted that against 1,598 complaints of nuisance and 634 written notices to abate the same, issued in 1888, the department has a record of 5,804 complaints and 1,814 written notices for abatement issued in 1889.

The methods, also, of conducting this branch of the service have undergone a radical improvement. The men formerly engaged in the work regarded it as the fulfillment of their entire duty if they awaited and acted upon the complaints of nuisance received from private citizens. The force of today is employed and trained to keep the city clean, to exclude animal and household refuse from the public alleys, to abate the practice of throwing waste material upon the surface of the soil, to secure the periodic removal of garbage and manure and the regular cleansing of vaults and cesspools. The department is grateful for any aid which the public is disposed to give, in the way of information of existing nuisances, but it proposes to hold its inspectors responsible for the discovery of insanitary conditions within the districts to which they are assigned. Not less than nine-tenths of the nuisances abated during the year have been reported to the office by members of the force.

It is the custom of the department to give verbal notice to abate nuisance and, if this does not secure compliance, to serve, in accordance with the law, a written notice, ordering an abatement of the same within a given number of days. Failure to respect this notice is a violation of the law and necessitates carrying the case into the municipal court. It is the policy of the department to hold the owner responsible for the sanitary condition of his property, whether occupied by himself or leased to another. If the owner is a non-resident in the city, or has delegated his control of the property to an agent, the latter is similarly held. If a direct and wilful violation of the health-law can be proven against a tenant or occupant, the department is glad to relieve the owner or agent of the burden of the offense, but, as a rule, this is impossible, and the public interest is best subserved by fixing the responsibility upon the permanent proprietor rather than upon the transient tenant.

It is a tribute to the good sense and public spirit of the community that the written notices of the department are commonly respected and but seldom does the ultimate necessity arise for carrying nuisance cases into court. In some thirteen instances only has it been necessary to enforce obedience by this means, and that justice has been upon the side of the department, on these rare occasions, is evidenced by the fact that in nine of these cases the finding of the court has been in favor of the state.

While prevention is universally conceded to be better than cure, it must be remembered that the primary duty of the department is to remedy existing evils, to investigate complaints, to abate nuisances, to eradicate actual disease; and that, only after these things are done, can it wisely

employ its officials in the inspection of houses and public buildings, or in hunting down the possible causes of future ill. Viewed in this light, it is satisfactory to note how well the opportunity for the performance of these secondary duties has been used. In 1888, 613 house inspections were made. In 1889, the relatively small force of men has increased this total to 1833. A very large proportion of these house inspections have been made along the line of sewer streets, for the purpose of determining, not only the general sanitary conditions of the buildings inspected, but also the adequacy of their plumbing facilities and water supply and the fact of the existence or non-existence of sewer connections therein. It is proposed to make the information, so obtained, the basis of a systematic endeavor to induce the completion of sewer-connections upon these streets and the abandonment, along these lines, of those standing menaces to public health--the privy vault and the cesspool. No more important step for the sanitary welfare of the city could be taken and the department has expected to have its hands strengthened in the endeavor, by your honorable body, through the passage of the proposed ordinance regulating sewer-connections, vaults and cesspools. Some apparent doubt of its expediency seems to have delayed the decisive action which the department still hopes to see taken upon it. With the assistance of this measure, the good work will go smoothly on; without it, the more cumbersome machinery of the special State law must be invoked.

A very complete inspection of houses has also been made in certain districts which have been notably infected with scarlet fever, diphtheria and typhoid fever, with a view to localizing the foci of these diseases, discovering their causes and limiting their spread. The good results of these efforts are manifest in a gradual but steady decline of these maladies.

While the department is under the necessity of emphasizing the secondary importance of house inspection, it is its ultimate object, nevertheless, to carry on this work, in the course of time, to the point of completion. It proposes by this means to put the city in possession of a sanitary history, as it were, of every dwelling and public building and, to this end, the office has been provided with a full series of Rascher's insurance maps which will form an illustrated index to the files of house inspections as fast as they are completed. The task is a large one, but its value will ultimately justify the time and labor which have been and will be put upon it. These maps and files will always be open to the public and if any one, who is desirous of obtaining a report of a given building, finds that the inspection upon it has not yet been made, the department will be glad to receive his application for the same and to assign a deputy to the task of making a special inspection as early as the more imperative duties of the office will permit.

A feature in this branch of the sanitary service, which year by year becomes more and more prominent, is the demand, which must continually increase as the city grows, for the services in this department of a trained plumbing inspector. The office is in daily receipt of complaints concerning defective plumbing and it usually requires a trained eye and a skilled hand to discover the nature and location of the defects and to determine their sanitary importance. The head of the department of buildings, Mr. John M. Hazen, and his assistant, the plumbing inspector, have cheerfully and ably seconded the efforts of this department to respond to these calls; but such occasional assistance is not adequate to the public needs, nor should it be demanded of officials who are busily engaged in their own peculiar duty of supervising the construction of new plumbing. Few nuisances are more actively dangerous than those which arise from imperfections in plumbing and it is doubtful if anything would more materially benefit the public health than a systematic inspection of these conveniences in private houses and business blocks, followed by a general repair of the numberless faults which are common thereto. The writer would earnestly commend to your consideration the wisdom of adding such an employee to the force.

No systematic inspection has been attempted, during the past year, of the public school buildings of the city, upon which a very detailed statement was made in the pages of the last annual report. The importance of the subject of school house sanitation cannot be too persistently urged upon the public mind, and it is well for the city that its board of education is alive to the fact. It is a matter for congratulation that the remainder of the old

Madison school building has been destroyed and that, in its place, the other half of an improved sanitary structure has been reared. It is to be hoped that, within the coming summer, the Jackson school building, which remains in a most unsanitary condition, will be consigned to the same fate.

Perhaps it is too much to expect that expensive systems of ventilation should be speedily put into old school-houses, but the department would urge that it is most undesirable to put up new buildings with anything short of "the fan system"—the only method of ventilation which, for such structures, is a demonstrated success. Wherever large numbers of people are habitually congregated, and particularly wherever young children are massed together, the sanitary conditions should be above reproach; for it must be remembered that the dangers of insanitary surroundings multiply in direct ratio to the number of persons assigned to the occupation of a given space.

Some minor complaints have been received in the course of the year from individual school buildings concerning incidental nuisances, but these have been easy of removal and have received the prompt attention of the school authorities.

DISEASED AND DEAD ANIMALS.

In every large community the prevalence of disease and death among domestic animals is a matter of sanitary as well as economic concern. In fact, so large is the number of these animals, ranging in size and value from the horse to the cat, which die annually, that their removal constitutes the most considerable and expensive item of our scavenger service. It is too often the case that owners discard their property in live stock just as soon as disease or decrepitude renders it unprofitable and, by the time death overtakes the disowned and disabled brute, the disposition of its remains has become a charge upon the public purse.

The most virulent of the animal diseases, which prevail within the city limits, is glanders, a malady which attacks by preference the horse and the mule. In past years the cases reported have been disagreeably numerous. The importance of its discovery and suppression is emphasized by the fact that it is easily communicable to man. In fact, the duty of isolating and destroying animals infected with this disease may be said to be the most extra hazardous business of the department. The vigorous measures it has employed, however, in dealing with the malady, have been fruitful of good results. Reference to our summarized tables shows that less than two-thirds the number of cases have been quarantined during the past year, that were isolated in the preceding twelve months, while only one-half the number have been killed.

The duties of the department in this direction are rendered more burdensome by the opposition of many ignorant, so-called veterinary surgeons, who, for the sake of gain, profess an ability to cure what is generally conceded by the highest authorities to be an incurable disease. By these abuses of public confidence, certain stables in the city have become seriously infected, and in one or two instances it has become necessary for the department to order the destruction of barn buildings.

As compared with preceding years, there has been a satisfactory absence of hog cholera in the city—an immunity which is due in large part to the absence of the hogs themselves; the hog-pens having been removed beyond the limits by order of the department in the early part of the year.

In discussing the question of food inspection enough has already been said of the almost universal tendency among cattle to tubercular diseases. It is safe to say that were the means provided for the exercise of the same measures in the detection and suppression of tuberculosis among milch cows and beef steers which are employed in the discovery and management of glanders among horses, the milk and the meat supplied to the community would be of higher grade and would seldom be the media of contagion which now they often are.

THE SCAVENGER SERVICE.

So long as the present commissioner of health has been at the head of the department he has urged the wisdom of placing the scavenger business under a license system. So closely related is this occupation to the public health and so injurious does it become unless conducted with scrupulous care, that the propriety of putting it under official control, by a method

which would make the benefits of a license depend upon conformity to certain sanitary regulations, would seem to be beyond cavil. So far, however, your honorable body has not concurred in this view and the department has been thrown back upon such limited power as it possesses, under the health law, to regulate the scavenger service.

To this end it has issued rules forbidding the emptying or cleansing of vaults or cesspools until a permit so to do has been granted from this office. This permit dictates the hours within which such scavenger service shall be performed and the manner of its performance. Its issuance depends upon the submission by the scavenger of his wagon and other utensils to careful inspection, as often as may be required by the department, and upon the maintenance of the same in a condition approved by the latter. The permit must accompany the scavenger wagon to the dump and be delivered to the dump-keeper, who returns it promptly to the health officer. Vaults and cesspools must be cleaned to the bottom and, together with their surroundings, must be left in a sanitary condition.

Failure to comply with any of these rules subjects the scavenger to a refusal of future permits. So far, the plan has worked well and is, to say the least, an improvement upon the former absence of all regulation of the scavenger's business.

The volume of this business carried on within the city limits is increasingly large. It is estimated that 108,924 loads of garbage and other refuse and 9,703 loads of night-soil have been disposed of during the past year, while orders have been issued by the department for the removal of 2,208 dead animals, in addition to the many removed by private owners. The Mississippi river is still used as the principal depository for these waste materials, although this pernicious practice has been condemned by the chief of the U. S. engineering corps in this district in his report to the government.

The city is under contract with the Northwestern Scavenger Company for the removal and disposal of such dead animals and refuse as must be cared for at the expense of the city, subject to certain sanitary regulations imposed by the department.

HUMAN CONTAGIOUS AND EPIDEMIC DISEASES.

With each succeeding year, the student of contagious and epidemic disease in Minneapolis must be newly impressed with the fact that among the undesirable conditions of metropolitan growth, is the tendency of certain maladies of this class to become epidemic or ever-present in the community. It is one of the most important functions of a health department to postpone or limit the operation of this almost inevitable tendency.

The principal diseases, which thus make their home in a large city and may, at times, assume epidemic proportions, are smallpox, scarlet fever, diphtheria, measles and typhoid fever. So many are the avenues through which these diseases gain entrance to a city, so ripe are the conditions which assist in their propagation, so careless are the majority of the people of the necessity for the rigid isolation of those who are attacked, and so general is the disposition to shun quarantine restrictions, that the task of suppression or exclusion is beset with difficulties.

To meet these conditions, so far as possible, the department employs a force of medical inspectors, whose duties are largely confined to the investigation, quarantine and disinfection of contagious diseases and the houses in which they exist. These physicians act under the direct supervision of the commissioner of health and have found, during the year, opportunities for the employment of their best endeavors.

The last annual report submitted to your honorable body detailed the circumstances of the outbreaks of smallpox which occurred in January and February last. Active measures were taken at that time to suppress the disease, and with apparent success.

Nothing more was heard of the malady until November 18, when a man, engaged as a book agent, who reported that he had been sick for several days, presented himself at one of the private hospitals in this city. The physician in charge, being doubtful of the nature of the complaint, sent him to Dr. M. P. Vander Horck, who immediately diagnosed the case as one of smallpox and turned it over to the department. The commissioner immediately summoned all his available force, sent the patient and three of his

associates, who had closely companioned him for several days, to the quarantine hospital, and proceeded to the task of following up and vaccinating exposed persons. The attempt was embarrassed by the fact that these men had led an itinerant life, had canvassed large areas of the city, and had boarded at several public restaurants. A large number of people, however, were vaccinated, and, in order to put a premium upon vaccination in general, the department announced an offer to put vaccine points into the hands of any physicians, free of cost, who would vaccinate patients without charge. In this way some six thousand points have been distributed during the year. The sick man made a good recovery and only one of his associates exhibited any signs of the disease. In this case, the development of a few pustules evidenced the existence of a mild attack of varioloid.

On November 30, a waiter in one of the restaurants which had been visited by the book-cannasser and his friends, was taken sick. He was attended by Dr. E. A. Skaro, who, suspecting the character of the trouble, sent for the commissioner of health. He and his assistants at once pronounced the case smallpox and removed the patient to quarantine. The same procedure was adopted as in the former instance; a prompt vaccination was made of all persons known to have been exposed and the building was closed and completely fumigated throughout.

No other cases, even remotely traceable to these, have been discovered. On December 11, however, a man who was tramping his way from the west, along the lines of railway, with the intention of working down to Missouri, found himself, en route, very sick, and leaving the train, near the limits of the city, wandered about the outskirts and in the neighboring suburbs for some time, and was finally carried, by some good Samaritan, to the poor farm. There he was found by Dr. Frank Burton, the physician in charge, who sent for the health commissioner to confirm and act upon the diagnosis of smallpox he had made. This man was similarly removed to the quarantine hospital, the inmates of the poor farm and others exposed were vaccinated, and no ill results have followed. All of these cases have done well, although the last has proved to be the most critical of the series. The department does not anticipate any further spread of the disease from either quarter.

Both of these spores, however, illustrate the readiness with which smallpox, or any other contagious malady, may find entrance to a community. Here are persons, in each case, engaged in a shifting occupation, new-comers to the city, of transient residence and uncertain antecedents, importing a grave disease and continuing their wandering avocations for hours or even days after premonitory symptoms had appeared, and exposing, in the meantime, hundreds of people in their own homes, upon the streets, in public conveyances and in eating houses, to the dangers of infection. While the most active vigilance would not suffice to hinder the operation of these uncertain and uncontrollable events, the most active measures are justified, in the light of them, to stamp out their consequences. A community can better afford to maintain the machinery of a health department at twice the cost which the city of Minneapolis is called upon to sustain, than to permit the successful invasion of its limits by such an epidemic disease.

The statistics of other contagious diseases, which have afflicted the city during the year, are worthy of comment. Measles, which was so widely prevalent in 1888, has almost died out; only 136 cases having been reported to the department, the majority of which appeared in the early months.

Scarlet fever and diphtheria have, on the contrary, increased and have exercised the activities of the service. Their spread has been very general throughout the city; but the third, sixth, seventh and eleventh wards have been most markedly infected.

A careful study of the course of the contagion of both diseases has led up to the belief that ignorance or disregard of the principles of quarantine has been the primary cause of their increasing prevalence. Acting upon this belief, the department concentrated one-half of its force, some months ago upon the duty of compelling an observance of its quarantine regulations, and good results have generally followed.

The medical inspectors continued the diagnosis of cases, the placarding of houses and the superintendence of the details of disinfection; but they were

reinforced by a number of health inspectors, assigned to police service, with instructions to patrol quarantined houses, to arrest persons entering or leaving the same without permission, to attend and insure the privacy of funerals, in the event of deaths from contagious disease, and to conduct the fumigation of infected houses, wherever the inmates could not be depended upon to carry out its details properly themselves.

The quarantine period of scarlet fever was fixed at not less than three weeks and school attendance was prohibited within two weeks of the quarantine release. The school authorities have cordially seconded the department in its efforts to obviate the tendency for the public school to become an avenue of contagion. In some instances the department has been obliged to seek the aid of the courts in enforcing quarantine regulations. The non-report of contagious diseases, the removal of quarantine placards and the needless exposure of minors to contagion, have been the causes of action and, in each case, the offender has been found guilty and has been either fined or reprimanded with a suspended sentence. The department always regrets the necessity for prosecution, but is under compulsion of that necessity to enforce the law.

The mortality which has attended scarlet fever and diphtheria indicates that the prevalence of a disease does not determine the percentage of its fatality. The deaths from scarlet fever have been very few, less than five per cent., in fact, of the cases reported. Diphtheria, on the other hand, which has increased proportionately less than scarlet fever, has been of more than usually severe grade and shows a fatality of thirty-five per cent.

Among other endemic diseases, typhoid fever has not prevailed to an unusual degree, although the department has secured the report of a larger number of cases than have ever been recorded before. It proposes to continue its endeavor to obtain from physicians reports of the occurrence of this disease, with a view to the discovery and removal of its active causes. Already, in several instances, it has been enabled, in this way, to trace out its origin, usually to infected wells, and to arrest its progress by directing the abandonment of these prejudiced water sources.

Cholera infantum, the scourge of infancy in the heated months, has shown a smaller degree of activity, during 1889, than it has had in Minneapolis for several years.

Despite the prevalence of diphtheria and scarlet fever, the city, as a whole, has enjoyed an unusually healthful year, and it cannot be doubted that this fact is due, in some degree, to its improved sanitary conditions.

Very naturally, some anxiety prevails, at the present time, concerning the prospect of an epidemic of influenza. The few cases which have already occurred may prove to be the advance guard of the attack. There is no reason to expect that Minneapolis will escape its share of the universal complaint, while the dryness of its atmosphere may be unfavorable to the development of this disease in its severe forms. The known history of past epidemics justifies the belief that it has no fatality of its own, and that when death occurs, immediately subsequent to its attack, it is from the supervention of some complicating disease which some idiosyncrasy or susceptibility upon the part of the individual sufferer invites. It may be epidemic in its occurrence, but it is in no sense a contagious disease.

DEATHS.

One of the necessary ultimate consequences of disease is death and, if diseases have been few, it is fair to expect that the mortality of the city has also been small. And the expectation is justified by the facts. Minneapolis has every reason to be satisfied with the death-record of 1889. It has been both actually and relatively smaller than in 1888. For the year ending March 31, 1889, the total of deaths was 2,689. For the year ending December 31, it is 2,273.

In so rapidly growing a city as this it is difficult to form a correct estimate of the population upon which the calculation of a death rate may be based. The department has preferred to err upon the safer side and has made its figures upon the conservative estimate of 200,000, the same number upon which its rate of last year was made. Nevertheless, the mortality rate shows a very marked reduction, a decrease which, by the way, has been progressive for the past three years. In the twelve months ending April, 1887,

it stood at 17 per thousand; in the year closing April, 1888, it fell to 15 per thousand; in the period ending April, 1889, it reached 13.4 per thousand; in the year which this report brings to an end, it touches its lowest mark, 11.3 per thousand.

It should be observed, also, that this sum-total of death and the rate based upon it, include two items which, in most cities, are not included in these figures, viz.: still-births and premature-births. In St. Paul, for instance, these so-called death-causes are eliminated from the official count, and hence the death-rate falls. In Minneapolis, during 1889, 250 still-births and premature-births have occurred, and if this number be subtracted from the total of deaths, we shall have 2,013, with a death-rate reduced to 10.06 per thousand.

In the pages of the last annual report attention was drawn to a fact which is even more conspicuous in the death tables of this year—the notable discrepancy between the number of deaths (279) certified to by the coroner and the number of deaths by accident or violence, (73) which properly come under his official notice. The total of the death certificates signed by him is thus increased, to a small degree, by the occurrence of deaths from disease in persons who have not been attended by a physician, but to a much larger degree—and it is for this cause that public notice is invited to the fact—by still-births and premature births, in remarkable numbers, which have been attended by midwives whose certificates the department cannot recognize and who must needs therefore call upon the coroner for assistance. The phenomenon is of importance because it should instruct the public that infants, delivered by these ignorant and often incompetent women, die, or are born dead, with a frequency which is out of all proportion to necessity and should inspire some form of legislation which would be restrictive of midwife practice. The propriety of such a step is further emphasized by the fact that puerperal diseases, terminating in the death of the mothers so attended, are not uncommonly traceable to these same attendants.

The statistics of death and the classification of death-causes have been further improved during the year and will repay a careful analysis. The items concerning the occupation, nativity, residence and parentage of the deceased have been officially recorded, in order that the death registry of the department may serve the purposes of the eleventh United States census.

In inviting the attention of your honorable body to the statistics which occupy the succeeding pages it is but fair to the department to re-emphasize the apparent relationship between the greatly increased work of the office, the improved sanitary condition of the city, the relative freedom from disease in general and the small death rate of the year.

BURIALS AND DISINTERMENTS.

The rules of the department which govern deaths, burials and disinterments have a medico-legal as well as a sanitary significance. That the cause of death should be promptly reported by the attending physician or the coroner, and that the body of a dead person should not be moved, buried, or otherwise disposed of, unless a permit has been granted upon the basis of the certificate of death, are regulations which protect the public from foul play, as well as from the insanitary consequences of exposure to contagious diseases or of improper burial. That a dead body should not be retained for a longer period than three days unburied is a bar against concealment as well as a sanitary precaution against the prejudice of the living by the dead. That the public should be informed of the place of burial is a guarantee of proper interment in an approved cemetery.

The department, in despite of the obvious necessity for and propriety of these regulations, has met with some trouble in their enforcement and has, in one instance, found it necessary to test its authority over these matters in the courts, where it has been duly confirmed in its position. This decision in its favor has been of the greatest value in determining, indirectly, the powers of the department and of your honorable body to license or forbid the use of cemeteries within the city limits.

For, in accordance with the action taken April 1, Maple Hill cemetery was ordered to be closed and the department has refused to grant permits for burial therein since that time. This step has aroused the opposition of interested parties and efforts have been made to marshal public sentiment in their behalf. The law and the evidence however have been upon the side of

the department and, where these are, public opinion usually follows. It may prove to be desirable to give the east side a suitable cemetery but it should be distinctly beyond the limits of population. Burial places, encompassed by dwelling houses, must be injurious to the public health and their ultimate removal is merely a question of time.

The department has been scrupulously careful in its enforcement of the law which forbids public funerals, in the event of death from contagious diseases, and which dictates the method of preparing the remains, in such cases, for burial and shipment. It is satisfied that the neglect of such precautions is commonly fruitful of the spread of contagious and infectious diseases.

GENERAL STATISTICS.

A fund of summarized information will be found in the statistical tables, at the close of this report, which cannot be given in these descriptive pages. These tables constitute an epitome of the labors of the department. Their accuracy can be vouched for so far as the knowledge and authorship of the department is responsible for the estimates and figures. This may be said to apply to all the statistics, saving those of births and marriages. The latter being based upon the licenses issued by the clerk of the county, are probably correct. For the record of births the department is dependent upon the office of the city clerk and the conditions, under which the statistics are obtained, are not such as to guarantee their accuracy.

The law under which the collection of these data of births and deaths is delegated to the city clerk is a travesty upon good public policy. The health department, in every city, is the natural repository of all vital statistics. It is the avenue through which reports of births as well as deaths should come. Its machinery is such as to make the collection of the one as easy as the other and it need be at no cost either to the city, the county or the state. Deaths *must* be reported to the department as births *should* be.

But a law exists which determines that in cities of over 100,000 inhabitants this duty shall be removed from the charge of the health officials and placed in the hands of the city clerk, and bestows upon the latter a fee of twenty-five cents, payable from the county treasury, for each birth and death recorded.

There is neither right nor reason in this law. The larger the city the better is its health department equipped for such service, the less will it cost in its performance, and the more desirable is it that all the health interests of the community should be concentrated under the same management.

The payment of a fee for this service is an outrage upon the public purse. The city pays for the blanks upon which the returns are made and for the salary of the clerks who record them. The health department must perforce receive the certificates of death, in order that it may approve and issue burial permits upon them, and it is to the courtesy of this department that the city clerk owes his death records. His returns of death are nothing more nor less than a partial transcript of the certificates of death required by the department from physicians or from the coroner under the health laws. Certificates of birth are sent to him directly by attendant physicians or midwives, or are collected by his clerks in a general canvass of the city. They could be obtained, without any other cost than the city now has to meet for stationery and clerk-hire, by the department of health and would form, in its hands, a valuable and reliable feature of our vital statistics. If fees are paid to any one it should be to the physicians who make report of these births and deaths. There is a gratuitous service and the only one which is a tax upon personal effort and convenience. And, after all, when the returns have been collected, recorded and reported to the city clerk they are lacking in the most vital point of accuracy, and hence in their essential value. For this superfluous law does not require him to record or furnish the place of birth of the new-born babe or the place of death of the deceased. And it may be assumed that he does not over-step the requirements of the law. In consequence, there is no possible check upon the correctness of the returns and nothing to prevent an unscrupulous officer from multiplying his statistics at pleasure, so far as the births are concerned. And, pre-supposing the honesty of the official and the integrity of his purpose to turn over to the city treasury these perquisites, there is no good reason why the county should be taxed for the benefit of the municipal purse.

An effort was made, prior to the passage of the special law re-organizing

the health department to incorporate the collection of all these statistics among the duties of the office, but under pressure of the influence of persons interested in maintaining the perquisites of the city clerk's office, the item was dropped from the bill.

Appended to the health statistics proper is the annual record of meteorological observations made by Wm. Cheeney, Esq., voluntary observer of the United States signal service.

During the year the foundation has been broadened for the upbuilding of a library of comparative statistics by the gradual collection of monthly and annual reports from all the large cities of the world.

EXPENSES.

Some criticism of the department has been called forth by the fact that its appropriation for the year just closed has been overrun. The department would courteously reply that it has no apology to offer for itself. The appropriations made have never been sufficient for the needs of the service. The comptroller has annually requested an estimate of the expenses to be met during the ensuing year; and, unlike some other branches of the city government, the department has based its demands upon actual necessities and has found it impossible to make any suitable allowance for those more or less expensive emergencies which, like an epidemic of smallpox, may and often do arise. In submitting its estimates it has emphasized the barely essential features of its figures, but, in despite of this fact and without consultation with or further reference to the department, the gross sum has been arbitrarily cut down. In consequence it has been impossible to live strictly within the limits of the reduced appropriation.

To illustrate, in 1888 the department made up its estimate upon a basis of actual expenditure and asked for \$20,000. The appropriation was granted for \$17,000, and the actual expenses of the office have reached a cost of \$18,316, while the unestimated cost of quarantining contagious diseases has involved a further outlay of \$2,194, as a reference to the table of expenses of the department will show. A necessary growth of the department must keep pace with the growth of the city, and, in recognition of this principle, an estimate of \$25,000 was submitted for 1890, and has been leveled, as before, without ceremony, to \$20,000.

The department must be inevitably hampered by these financial restrictions. Good work along new lines must be discouraged. The occurrence of an epidemic, or of any other unlookedfor emergency, must seriously embarrass its action.

Either of the amounts cited is small for the support of the sanitary service of a city of this extent, and money could not be expended for the public purse to better advantage, or with more substantial returns in municipal prosperity, than that which is devoted to the interests which subserve the public health. The value of the investment has been illustrated by the health history of Minneapolis during the past year, which these pages record. While we cannot measure the part which the department of health has played by its active improvement of the sanitary condition of the city, or by its limitation of the spread of contagious disease, in lowering the death-rate, it has unquestionably had its share, if prevention avails anything, in bringing about that result. And that result has an economic worth. A reduction of the rate of mortality by two in the thousand means the saving to the city of Minneapolis of 400 lives. The English statistician, Dr. Farr, estimates that the cheapest of English lives—that of the agricultural laborer—is worth at a mean valuation \$750 to the community, and if we accept this figure, which is far below the average worth of American life, we have a saving of lives to the state and to the city which may be estimated at \$300,000 in economic value. If we should credit to the officers of the department only ten per cent. of this saving, we should far more than cover the cost of its annual maintenance. The consideration puts the financial support of the department in a new light and is worthy of a serious thought.

S. S. KILVINGTON, M. D.,

Commissioner of Health.

HEALTH DEPARTMENT EXPENSES.

Salaries.....	\$14,004.76
Printing and stationery.....	994.88
Hardware.....	64.50
Advertising.....	18.00
Repairs at crematory.....	102.92
Telephone service, 11 months.....	99.00
Removal of dead animals per contract, 1 month.....	358.33
Scavenger service.....	548.50
Subscription to sanitary papers.....	19.00
Rent of dump.....	480.00
Rent of crematory.....	180.00
Livery.....	28.50
Veterinary surgeon's services.....	182.75
Analysis of water.....	14.00
Stencils.....	13.75
Repairs to dump.....	110.16
Law books.....	10.00
Maps for annual reports.....	75.00
Incidentals.....	13.69
Postage.....	55.74
Expenses of two investigating committees to Chicago.....	336.50
Expenses of Dr. S. S. Kilvington to New York, to A. P. H. A.....	89.00
Telegrams.....	14.73
Railway fare of patients.....	1.50
Express on books and newspapers.....	6.33
Fuel for crematory.....	794.55

\$18,316.11

VACCINATION, MAINTAINING QUARANTINE AND QUARANTINE HOSPITAL EXPENSES.

Professional services to small pox patients.....	\$345.00
Clothing destroyed.....	55.25
Dry Goods and clothing.....	172.15
Vaccine points.....	188.09
Fuel.....	264.80
Drugs and disinfectants.....	350.84
Meat.....	62.87
Lime.....	11.80
Live stock, hogs.....	10.00
Groceries.....	269.73
Horseshoeing.....	31.70
Blacksmith bills.....	9.69
Nursing sick.....	50.00
Furniture.....	48.85
Laundry.....	6.16
Feed.....	131.91
Harness and repairs.....	26.50
Rubber goods.....	14.85
Repairs and ambulance.....	58.95
Filling ice house.....	32.00
Garden seeds.....	15.11
Combination fence.....	38.00
Fruit.....	.75

2,194.45

\$20,510.56

Table of Nuisance Complaints for the Year Ending December 31, 1889.

WARD.	Complaints for year ending Dec. 31, 1889.	Complaints for year 1888.	Increase over 1888.
One.....	231	53	178
Two.....	187	58	129
Three.....	1,003	188	815
Four.....	1,075	296	779
Five.....	698	252	446
Six.....	412	86	326
Seven.....	568	158	410
Eight.....	498	117	381
Nine.....	417	127	290
Ten.....	115	49	66
Eleven.....	506	142	364
Twelve.....	30	19	11
Thirteen.....	64	53	11
Total.....	5,804	1,598	4,206

Table of Written Notices to Abate Nuisances for the Year Ending December 31, 1889.

WARD.	Written notices issued for 1889	Written notices issued for 1888	Increase over 1888.
One	92	27	65
Two	72	42	60
Three	231	135	96
Four	235	42	253
Five	255	36	219
Six	158	99	59
Seven	171	63	108
Eight	212	41	171
Nine	93	60	33
Ten	15	14	1
Eleven	212	89	123
Twelve	5	4	1
Thirteen	3	22	19
Total	1,814	644	1,170

*Itemized Table of Written Notices Issued During the Year Ending December 31, 1889, Compared with 1888.

TO CLEAN.	WARD NO.													Total 1889.	Total 1888.
	1	2	3	4	5	6	7	8	9	10	11	12	13		
Privy vaults.....	64	51	170	186	197	132	151	136	64	10	157	4	2	1,324	355
Cesspools.....	5	3	48	34	29	30	5	12	2	....	22	....	....	190	58
Garbage, manure, refuse.	47	41	138	178	170	105	99	143	50	11	140	2	2	1,126	429

Total number of vaults cleaned by city scavengers, 1889, 5,756; 1888, 2,870.

Total number of cesspools cleaned by city scavengers, 1889, 2,158; 1888, 1,080.

Table of House Inspections for the Year Ending December 31, 1889, Compared with 1888.

WARD.	Number of houses 1889.	Number of houses 1888.	Decrease over 1889.	Increase over 1888.
First.....	28	9	.....	19
Second	64	43	.....	21
Third.....	29	65	36	.....
Fourth	1,189	77	.....	1,112
Fifth.....	141	46	.....	95
Sixth.....	21	34	13	.....
Seventh.....	183	76	.....	107
Eighth.....	42	56	14	.....
Ninth.....	61	107	.....	.....
Tenth.....	5	10	5	46
Eleventh.....	61	70	9	.....
Twelfth.....	7	14	7	.....
Thirteenth.....	2	6	4	.....
Total.....	1,833	613	1,220	1,354

Total for 1888 are from April 1, 1888, to March 1, 1889.

*Totals in this table do not correspond with the generalized table of written notices for the reason that a single notice often does duty for two or more items of nuisance.

Summary of Contagious Diseases Among Animals for the Year Ending December 31, 1889.

	DISEASES.	
	Glanders.	Tuberculo- sis, etc.
Number of horses quarantined.....	40	.....
Number of horses killed.....	24	.....
Number of horses released.....	14	.....
Number of mules quarantined.....	1	.....
Number of mules killed.....	1	.....
Number of steers killed.....		21
Number of calves killed.....		2

Table Showing Number of Animals and Garbage Removed by City Scavengers During the Year Ending December 31, 1889.

No. of horses.....	469
" mules.....	65
" cows and calves.....	73
" hogs.....	2
" dogs, cats, etc.....	1,599
Total.....	2,208
No. of tons of garbage.....	16

Table of Loads of Garbage, Night Soil, etc., Dumped at City Dumps During the Year Ending December 31, 1889.

No. of loads of garbage.....	108,924
No. of loads of night soil, etc.....	9,703
Total.....	118,627
Water connections made during the year.....	1,000
Sewer connections made during the year.....	465

Table Showing Number of Animals Inspected by Meat Inspector During the Year Ending December 31, 1889.

Steers.....	1,375
Cows.....	1,743
Bulls.....	49
Veal calves.....	459
Sheep.....	6,761
Hogs.....	90
Total.....	10,477

Table of Contagious and Infectious Diseases by Wards for the Year Ending December 31, 1889, Compared with 1888.

WARD.	Diphtheria.	Scarlet fever.	Measles.	Typhoid fever.	Small pox.	Total 1889.	Total 1888.
First.....	41	14	7	17	.....	79	68
Second.....	22	49	7	11	.....	82	84
Third.....	108	94	32	58	.....	293	244
Fourth.....	36	73	6	32	.....	147	177
Fifth.....	32	99	11	53	3	198	231
Sixth.....	66	82	8	64	6	226	181
Seventh.....	89	87	11	23	6	216	201
Eighth.....	41	71	22	42	.....	176	171
Ninth.....	37	36	2	24	.....	99	132
Tenth.....	17	3	12	13	.....	45	109
Eleventh.....	73	90	18	73	1	255	198
Twelfth.....	1	10	.....	1	.....	12	23
Thirteenth.....	8	12	.....	.....	.....	20	26
Totals for 1889.....	571	720	136	411	16	1,854	.....
Totals for 1888.....	430	455	769	168	13	.....	1,835

All totals for 1888 are from April 1, 1888, to March 31, 1889.

Table of Deaths from Contagious and Infectious Diseases for the Year Ending December 31, 1889, Compared with 1888.

WARD.	Diphtheria.	Scarlet fever.	Measles.	Typhoid fever.	Total 1889.	Total 1888.	Decrease from 1888
First.....	17	1	1	7	25	31	.....
Second.....	5	1	.....	5	11	14	.....
Third.....	42	5	1	16	64	54	.....
Fourth.....	14	3	.....	10	27	23	.....
Fifth.....	3	1	1	21	25	27	.....
Sixth.....	20	4	.....	12	36	46	.....
Seventh.....	20	6	.....	6	32	30	.....
Eighth.....	9	4	.....	5	18	16	.....
Ninth.....	23	1	.....	4	29	38	.....
Tenth.....	9	1	.....	2	12	7	.....
Eleventh.....	36	5	.....	20	61	59	.....
Twelfth.....	2	1	.....	.....	3	4	.....
Thirteenth.....	3	1	.....	.....	4	3	.....
Totals for 1889.....	202	34	3	108	347	.....	.....
Totals for 1888.....	159	24	36	134	.....	358	11

Totals for 1888 are from April 1, 1888, to March 31, 1889.

**Registry of Deaths of the City of Minneapolis for the Year Ending
December 31, 1889.**

CAUSES OF DEATH.	Number of deaths.	SEX.		AGE.									
		Male.	Female.	Under 1 year.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 40 years.	40 to 60 years.	60 to 80 years.	Over 80 years.	Over 100 yts.	
CLASSIFICATION:													
I. General diseases	1,287	648	639	503	183	78	84	272	96	53	17	1	
II. Local diseases	906	491	415	365	124	24	34	133	119	86	21	...	
III. Accident and violent means.	80	64	16	3	5	4	9	35	19	5	...	...
CLASS I—ORDER 1.													
Preventable Diseases—													
Typhoid fever	108	63	45	...	1	6	22	70	9	...	...	...
Diphtheria	202	89	113	16	116	49	16	5	...	...	...	...
Measles	3	1	2	1	1	1	...	...	...	...	...	...
Scarlet fever	34	16	18	3	19	11	1	...	...	...	...	...
Whooping cough	9	5	4	6	3	...	...	...	...	...	...	...
Cerebro-spinal meningitis	50	25	25	15	14	5	5	10	...	1	...	...
Cholera infantum	112	58	54	97	15	...	...	...	...	...	...	...
(a) Breast fed	26	...	...	...	...	...	...	...	...	...	...	...
(b) Bottle fed	85	...	...	...	...	...	...	...	...	...	...	...
Septicæmia	10	7	3	2	...	...	...	5	3	...	...	...
Pyæmia	2	2	...	...	...	...	2	...	...	...	...	...
Puerperal fever	8	...	8	...	...	...	...	8	...	...	...	...
peritonitis	8	...	8	...	...	...	...	8	...	...	...	...
pyæmia	1	...	1	...	...	...	...	1	...	...	...	...
septicæmia	13	...	13	...	...	...	...	13	...	...	...	...
Abortion	3	...	3	...	...	...	...	3	...	...	...	...
Hydrophobia	1	1	...	...	...	...	...	1	...	...	...	...
Remittent fever	2	1	1	1	...	...	...	1	...	...	...	...
Pulmonary phthisis	181	83	98	4	4	2	31	99	34	7	...	...
Other tuberculoses	55	31	24	7	7	4	7	20	9	1	...	...
General tuberculosis	27	...	...	...	...	...	...	...	...	...	...	...
Tubercular meningitis	14	...	...	...	...	...	...	...	...	...	...	...
Tabes mesenterica	10	...	...	...	...	...	...	...	...	...	...	...
Potts' disease	3	...	...	...	...	...	...	...	...	...	...	...
Hip joint disease	1	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	10	6	4	4	...	...	...	5	1	...	...	...
Malignant carbuncle	1	1	...	...	...	...	...	...	...	1	...	...
Necrosis of femur	1	1	...	...	...	...	...	1	...	...	...	...
Total	814	390	424	156	180	78	84	250	56	10	...	...
ORDER 2.													
Constitutional Diseases—													
Cancer	73	33	40	16	1	...	...	7	30	18	1	...
of stomach	21	...	...	...	...	...	...	...	...	...	...	...
of uterus	9	...	...	...	...	...	...	...	...	...	...	...
of breast	6	...	...	...	...	...	...	...	...	...	...	...
of larynx	1	...	...	...	...	...	...	...	...	...	...	...
of liver	4	...	...	...	...	...	...	...	...	...	...	...
of intestines	3	...	...	...	...	...	...	...	...	...	...	...
of ovary	1	...	...	...	...	...	...	...	...	...	...	...
of pancreas	1	...	...	...	...	...	...	...	...	...	...	...
of pylorus	1	...	...	...	...	...	...	...	...	...	...	...
of rectum	4	...	...	...	...	...	...	...	...	...	...	...
of kidney	1	...	...	...	...	...	...	...	...	...	...	...
of œsophagus	1	...	...	...	...	...	...	...	...	...	...	...
of face	1	...	...	...	...	...	...	...	...	...	...	...
of neck	1	...	...	...	...	...	...	...	...	...	...	...
unknown	18	...	...	...	...	...	...	...	...	...	...	...
Sarcoma	3	1	2	...	...	...	...	2	...	1	...	...
Fibroma of uterus	2	...	2	...	...	...	...	1	1	...	...	...
Acute rheumatism	7	6	1	...	...	...	...	3	1	3	...	...
Leucocythemia	4	...	4	...	...	...	...	...	4	...	...	...
Marasmus	79	40	39	76	2	...	...	...	...	...	1	...
Alcoholism	6	5	1	...	...	...	...	4	1	1	...	...
Pernicious anæmia	3	2	1	...	...	...	...	1	...	2	...	...
Hereditary syphilis	5	2	3	5	...	...	...	...	...	...	...	...
Secondary syphilis	4	1	3	...	...	...	...	3	1	...	...	...
Purpura rheumatica	1	1	...	...	...	...	...	1	...	...	...	...
Chronic lead poisoning	2	2	...	...	...	...	...	...	2	...	...	...
Total	180	93	96	97	3	...	...	22	40	25	2	...

Registry of Deaths of the City of Minneapolis—Continued.

CAUSES OF DEATH.	Number of deaths.	SEX.		AGE.								
		Male.	Female.	Under 1 year.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 40 years.	40 to 60 years.	60 to 80 years.	Over 80 years.	Over 100 yrs.
ORDER 3.												
Miscellaneous—												
Still-birth.....	160	94	66	160								
Premature birth.....	90	53	37	90								
Old age.....	34	18	16								18	15
Total.....	284	165	119	250							18	15
CLASS II—ORDER 1.												
Nervous System—												
Cerebral congestion.....	10	7	3	4	3			1	1		1	
Convulsions.....	57	26	31	49	8							
Trismus nascentium.....	6	4	2	6								
Tetanus.....	3	3			1					1		
Hydrocephalus.....	11	8	3	7	3	1		1				
Meningitis.....	59	31	28	34	19	2	1	1	2			
Paralysis.....	6	4	2					1	1	1	3	
General spinal paralysis.....	1		1					1				
Infantile paralysis.....	2	1	1		1	1						
Hemiplegia.....	2	2								1	1	
Locomotor ataxia.....	1	1									1	
Acute myelitis.....	3	2	1	1				2				
Cerebral tumor.....	2	2							2			
Cerebral abscess.....	1	1						1				
Cerebral softening.....	3	3						2		1		
Cerebellar abscess.....	1		1					1				
Spina bifida.....	4	1	3	4								
Hydro-rachis.....	1	1		1								
Sunstroke.....	1	1							1			
Epilepsy.....	1	1					1					
Total.....	175	99	76	106	35	5	3	9	9	4	4	
ORDER 2.												
Respiratory System—												
Acute pneumonia.....	99	61	38		9	5	6	29	28	17	5	
Capillary bronchitis.....	162	85	77	107	49	3		1	1	1		
Pleurisy.....	3	2	1						1	1		
Empyema.....	3	1	2		1	1		1				
Emphysema.....	3	1	2				1	1	1			
Croup.....	2	2		2								
Atelectasis.....	15	11	4	15								
Oedema of lungs.....	1		1							1		
Gangrene of lungs.....	1	1					1					
Oedema of glottis.....	1		1			1						
Chronic bronchitis.....	5	2	3						2	2	1	
Pneumo-hydrothorax.....	2	2						1		1		
Asphyxia neonatorum.....	1	1		1								
Total.....	298	168	130	123	61	10	8	34	34	22	6	
ORDER 3.												
Circulatory System—												
Valvular heart disease.....	64	35	29	2	1	2	4	18	22	15		
Fatty degeneration of heart.....	11	6	5					2	5	3	1	
Apoplexy.....	22	13	9					5	8	6	3	
Cyanosis.....	38	23	15	38								
Umbilical hemorrhage.....	3		3	3								
Spinal hemorrhage.....	1	1										
Abdominal aneurism.....	1	1							1			
Endocarditis.....	5		5		1	1		1		2		
Pericarditis.....	2	1	1					1		1		
General atheroma.....	1	1								1		
Senile gangrene.....	1		1							1		
Embolism.....	2	1	1						2			
Hydro-pericardium.....	1	1								1		
Total.....	152	83	69	43	1	3	5	30	36	30	4	

Registry of Deaths of the City of Minneapolis—Continued.

CAUSES OF DEATH.	Number of deaths.	SEX.		AGE.									
		Male.	Female.	Under 1 year.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 40 years.	40 to 60 years.	60 to 80 years.	Over 80 years.	Over 100 yrs.	
ORDER 4.													
Digestive System—													
Gastro-enteritis.....	124	68	56	88	19	1	1	4	4	4	3		
(a) Infants, breast-fed.....	24												
(b) Infants, bottle-fed.....	83												
(c) Persons over three years..	17												
Gastric ulcer.....	4	2	2										
Peritonitis.....	42	20	22	1	2	3	5	2	3	3	1		
Cholera morbus.....	2		2					1	3	1			
Dysentery.....	9	4	4	1			1	4	2	1			
Intestinal obstruction.....	4	1	3					2	1	1			
Intestinal hemorrhage.....	1	1		1									
Typhlitis.....	1		1					1	1				
Strangulated hernia.....	2	2						1		1			
Pharyngeal abscess.....	1		1		1								
Total.....	190	98	92	91	22	4	7	36	15	11	4		
ORDER 5.													
Glandular System—													
Hepatitis.....	3	1	2						1	1	1		
Cirrhosis.....	12	5	7					3	5	4			
Abscess of liver.....	2		2						1	1			
Diabetes mellitus.....	2	4	4				1	3	4				
Cholæmia.....	2	2		1	1								
Atrophy of liver.....	2	2							2				
Splenitis.....	1	1							1				
Total.....	30	15	15	1	1		1	6	14	6	1		
ORDER 6.													
Genito-Urinary System—													
Uremia.....	2	2		1			1						
Bright's disease.....	28	15	13			1	6	5	9	6	1		
Nephritis.....	15	8	7		4	1	1	5	1	2	1		
Cystitis.....	4	3	1							4			
Puerperal mania.....	1		1					1					
" convulsions.....	3		3				1	2					
" thrombosis.....	1		1					1					
Extra uterine pregnancy.....	1		1					1					
Vomiting of pregnancy.....	1		1				1						
Ovarian tumor.....	1		1						1				
Pelvic abscess.....	3		3					2		1			
Hematocele.....	1		1					1					
Total.....	61	28	33	1	4	2	10	18	11	13	2		
CLASS III.													
Fracture of skull.....	15	14	1		2	1		7	4	1			
Fracture of spine.....	4	4					1	1	2				
Traumatic pneumonia.....	1	1						1					
Crushing of chest.....	1	1							1				
Hemorrhage from injury.....	1	1						1					
Septicæmia from injury.....	1		1		1								
Shock from injury.....	13	13				1	1	7	3	1			
Gangrene from injury.....	1	1						1					
Laceration of liver.....	1	1						1					
Fracture of pelvis.....	1	1								1			
Shock from burns.....	8	4	4	1	1	1	1	3	1				
Shock from operation.....	3		3					2		1			
Suffocation.....	3	2	1	2				1					
Drowning.....	12	10	2		1	1	4	5	1				
Hanging (execution).....	2	2					1	1					
Hanging (suicide).....	1							1					
Gunshot (suicide).....	7	5	2				1	2	3	1			
Poisoning (suicide).....	4	3	1					1	3				
Hemorrhage (suicide).....	1	1							1				
Total.....	80	64	16	3	5	4	9	35	19	5			
Total deaths for year ending December 31, 1889.....	2,273	1,203	1,070	871	312	106	127	440	234	144	38	1	
Total deaths for year 1888.....	2,689	1,460	1,229	1,057	431	108	121	521	251	144	56		

Table of Deaths by Months in Each Ward for the Year Ending December 31, 1889, Compared with 1888.

WARD.	January.	February.	March.	April.	May	June.	July.	August.	September.	October.	November.	December.	Total 1889.	Total 1888.
First.....	19	15	15	10	9	7	20	14	11	16	9	16	161	211
Second.....	9	3	20	14	7	7	8	4	10	6	7	5	100	136
Third.....	23	23	25	22	26	34	34	27	25	35	27	27	334	388
Fourth.....	8	22	21	19	13	10	22	15	10	21	11	22	194	210
Fifth.....	19	19	32	16	17	15	25	21	19	22	23	20	248	283
Sixth.....	25	23	16	24	19	27	28	22	27	20	18	22	271	336
Seventh.....	14	13	20	16	16	13	24	16	13	16	21	13	195	251
Eighth.....	16	11	17	11	11	13	22	11	12	7	15	8	154	156
Ninth.....	20	13	12	18	12	8	21	15	18	19	13	14	183	222
Tenth.....	6	1	3	7	2	7	9	5	8	2	6	9	65	55
Eleventh.....	19	11	31	18	30	27	18	20	23	40	22	19	378	320
Twelfth.....		1	4	2	1	1	7	6	3	5	5	2	31	50
Thirteenth.....	9	3	6	5	2	5	9	4	5	3	6	2	59	62
Total.....	187	158	222	188	165	174	247	180	183	207	183	179	2,273	2,689

Table of Deaths in Public Institutions for the Year Ending December 31, 1889, Compared with 1888.

	1889.	1888.
City Hospital.....	53	77
St. Barnabas Hospital.....	19	28
Homeopathic Hospital.....	6	5
Bethany Home.....	25	31
St. Anthony Hospital.....	7	6
Soldiers' Home.....	11	7
Northwestern Hospital.....	7	14
Maternity Hospital.....	5	10
Deaconesses Home.....	2	2
Sheltering Arms.....	2	1
St. Mary's Hospital.....	10	....
Total.....	143	181

Table of Deaths by Months and of the Annual Death Rate for the Past Thirteen Years.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	Estimated population.	Annual d'th rate per 1000
1877.....	31	30	45	26	30	25	48	46	49	35	32	28	425	35,760	11.8
1878.....	31	30	27	34	37	26	55	59	44	35	39	31	448	36,432	12.2
1879.....	52	52	40	57	64	50	96	84	66	52	55	59	727	38,860	18.6
1880.....	54	55	58	38	50	43	94	83	79	67	60	52	732	46,341	15.7
1881.....	68	61	75	83	92	91	136	121	139	124	133	114	1,237	64,666	19.1
1882.....	106	107	141	138	142	143	156	216	176	158	158	56	1,697	69,660	24.3
1883.....	140	108	124	122	126	102	168	205	161	145	139	137	1,677	86,784	19.3
1884.....	128	118	139	103	134	117	272	226	179	139	103	125	1,784	96,062	18.5
1885.....	118	142	98	120	129	52	254	221	131	122	116	121	1,624	118,599	13.7
1886.....	125	122	160	160	191	133	218	190	182	260	267	196	2,213	132,750	16.6
1887.....	155	164	155	184	197	228	290	229	224	206	172	187	2,391	177,743	13.4
1888.....	220	254	283	258	265	201	262	235	237	240	184	180	2,879	200,000	14.0
1889.....	187	158	222	188	165	174	247	180	183	207	183	179	2,273	200,000	11.3

Table of Burials in the Cemeteries of the City for the Year Ending December 31, 1889, Compared with 1888.

	1889.	1888.
Lakewood Cemetery.....	495	504
Layman's Cemetery.....	766	866
Maple Hill Cemetery.....	109	307
St. Mary's Cemetery.....	191	156
St. Anthony Cemetery.....	294	361
City Graveyard.....	167	228
Soldiers' Home.....	1	6
Jewish Cemetery.....	35	10
Crystal Lake Cemetery.....	62	45
Total.....	2,120	2,483

Nativities as Shown by Mortuary Tables, 1889, as Compared with 1888.

	1889.	1888.
Austria.....	3	10
Belgium.....	1	1
Canada.....	62	82
Denmark.....	13	16
England.....	26	26
France.....	2	2
Germany.....	75	88
Ireland.....	49	58
Minnesota.....	1,253	1,538
Norway and Sweden.....	282	287
Russia.....	12	8
Scotland.....	12	17
Switzerland.....	2	5
United States (other than Minnesota).....	455	509
Unknown.....	26	42
Total.....	2,273	2,689

	1889.	1888.
Number of deaths certified to by the coroner during the year..	286	265
Number of bodies shipped from the city for interment.....	283	349
Number of bodies received for interment from elsewhere.....	117	143

Table of Births for the Year Ending December 31, 1889.

MONTH.	Total births.	Still births.	Premature births.
January.....	260	16	6
February.....	293	10	3
March.....	316	19	11
April.....	290	17	9
May.....	251	8	13
June.....	248	20	5
July.....	295	8	5
August.....	282	10	6
September.....	307	15	11
October.....	276	11	8
November.....	197	10	8
December.....	249	16	5
Total.....	3,264	160	90

Meteorological Record

For the year ending December 31, 1889, from daily observations taken at the house at 7 a. m. and 2 and 9 p. m., at Minneapolis, Minnesota, by Wm. Cheney, Voluntary Observer, Signal Service, U. S. A., and prepared for the use of the department of health.

MONTH.	Monthly mean barometer corrected for temperature and elevation.	Monthly mean temperature.	Maximum temperature.	Minimum temperature.	Monthly range of temperature.	Water deposit, rain and melted snow in inches.	Relative humidity in 100 lbs. 100 being complete saturation.	Prevailing winds.	Inches of snow.
January.....	29.929	18.13	40	*12	52	1.035	.70	NW	71 $\frac{1}{4}$
February.....	30.068	10.45	47	*26	73	1.363	.62	NW	13 $\frac{3}{8}$
March.....	29.939	34.87	63	17	46	1.070	.66	NW	4 $\frac{1}{2}$
April.....	29.883	48.35	74	28	46	1.530	.56	NW	0
May.....	29.811	55.93	81	38	43	3.060	.58	NW	0
June.....	29.818	65.11	90	45	45	1.530	.67	N & S E	0
July.....	29.790	70.97	99	56	43	3.160	.70	N E	0
August.....	29.862	70.24	93	55	38	2.390	.67	N E	0
September.....	29.823	58.19	91	37	54	0.820	.69	S E	0
October.....	30.039	43.78	75	25	50	0.060	.68	NW	0
November.....	30.010	28.25	54	*5	59	1.082	.72	SE	8 $\frac{5}{8}$
December.....	29.904	27.53	44	*8	52	1.260	.73	SE	9 $\frac{3}{4}$
Sums.....						18.360			43 $\frac{1}{4}$
Means.....	29.903	44.32			50		.66		

*Below zero.

Maximum temperature for the year, July 7.....	99.00
Minimum temperature of the year, February 23.....	*26.00
Range of the year.....	125.00
Greatest range of thermometer in one day, February 20.....	41.00
Least range of thermometer in one day, March 13 and August 7.....	1.00
The warmest day was July 7, its mean temperature.....	87.25
The coldest day was February 22, its mean temperature.....	*16.75
The highest barometer was on February 23.....	30.925
The lowest barometer was on January 16.....	28.957
Range of barometer.....	1.968
Highest daily mean relative humidity of the atmosphere, January 15.....	.90
Lowest daily mean relative humidity of atmosphere, May 2.....	.34
Average yearly mean temperature for 24 years.....	42.18
Average yearly water deposit for 23 years in inches.....	28.948

*Below zero.

It will be seen by the above that the year 1889 was a little more than two degrees warmer than the average for twenty-four years, and that the water deposit for the year 1889 was ten and one-half inches less than the average yearly water deposit of twenty-three years.

WM. CHENEY,
Voluntary Observer, Signal Service U. S. A.

Chapter 413 Special Laws 1889.

AN ACT relating to the re-organization of the health department and the preservation of the public health of the city of Minneapolis, Minnesota.

Be it Enacted by the Legislature of the State of Minnesota:

There is hereby established an executive department in the municipal government of the City of Minneapolis, Minnesota, which will be known as the department of health, and shall embrace the mayor, the committee of the city council on health and hospitals, and the commissioner of health, and such other assistants and employes as are hereinafter provided for.

The executive officer of said department shall be called the commissioner of health of the city of Minneapolis and must be a competent physician of regular practice in said city.

Said commissioner shall have the management and control of all matters pertaining to the public health in said city under the supervision of the department of health.

Said commissioner, before entering upon the duties of his office, shall execute a bond to the city of Minneapolis, Minnesota, in the sum of three thousand dollars (\$3,000) with such sureties as the city council shall approve, conditioned for the faithful performance of the duties of said office.

Said department of health shall have the power to remove any subordinate officer, inspector or employe of said department of health at their pleasure, subject however, to the approval of the city council. And all orders and directions emanating from said department of health shall be issued in the name of said commissioner.

The said commissioner of health shall give to the mayor or other city authorities all such professional advice and information as they may require with a view to the preservation of the public health; and whenever he shall hear of the existence of any malignant, contagious or pestilential disease, he shall investigate the same, or cause it to be investigated and adopt proper measures to arrest its progress.

It shall be the duty of the commissioner of health to enforce all laws of the state and ordinances of the city of Minneapolis relating to the sanitary regulations of the city, and to cause all nuisances to be abated with all reasonable promptness. And for the purpose of carrying out the foregoing requirements he, or his subordinates, shall be permitted, at all reasonable times, to enter into any house, store, stable or other building, and to cause the opening of the floor, if he should deem it necessary, in order to have a thorough examination of cellars, vaults, sinks or drains, and to cause all privies to be cleaned and kept in good condition, and to cause all dead animals, or nauseous or unwholesome things or substances to be buried or removed or disposed of as the commissioner of health may direct.

In order to carry out the provisions of the foregoing section, it shall be the duty of the commissioner of health to serve a notice upon the owner, occupant or agent of any lot, building or premises, in or upon which any nuisance may be found, or the owner or cause of any such nuisance, requiring them to abate the same in such manner as he may prescribe, within reasonable time. Provided, that it shall not be necessary in any case for the commissioner to specify in his notice the manner in which any nuisance shall be abated, unless he shall deem it advisable to do so, and such notice may be given or served by any officer who may be directed or deputed to give or make the same; and if such owner, occupant or agent shall neglect or refuse to comply with the requirements of such orders within the time specified, they shall be subject to a penalty hereinafter provided; and it shall be the duty of the said officer to proceed at once, upon the expiration of the time specified in such notice, to cause such nuisance to be abated. And provided, further, that whenever the owner, occupant or agent of premises, in or upon which any nuisance may be found, is unknown or cannot be found, the said commissioner shall proceed to abate the same without notice; and in either case the expense of such abatement shall be collected from the person or persons who may have created, continued and suffered such nuisance to exist.

Any expense incurred by the health department in enforcing the provisions of the above sections, shall be recovered in an action of debt, to be brought in the name of the people of the state of Minnesota against the party offending.

It shall be the further duty of the commissioner of health to visit and examine, or cause to be visited and examined, all sick persons who shall be reported to him as laboring or supposed to be laboring, under any yellow or ship fever, smallpox, cholera, or any infectious or pestilential disease, and cause all such infected persons to be removed to the cholera, smallpox or other hospitals, or to such other safe and proper places as he may deem proper, not exceeding three miles from said city, and cause them to be provided with suitable nurses and medical attendance at their own expense, if they are able to pay for the same, if not then at the expense of the city.

It shall be the further duty of the commissioner of health to cause a notice, written or printed in large letters, to be placed upon or near any house in which any person may be affected or sick with small pox, scarlet fever, or any infectious, pestilential or epidemic disease, upon which will be written or printed the name of such disease and an order forbidding any person or persons, excepting the medical attendant and spiritual advisors, from going to or leaving said premises, and if any person or persons shall deface, alter, mutilate, destroy or tear down such notice, without permission of the commissioner of health, or shall otherwise fail to comply with this act, such person or persons shall be subject to the penalty hereinafter provided; the occupant of any house upon which such notice shall be placed or posted as aforesaid, shall be held responsible for the compliance with the act and for the unauthorized removal of the notice, and if the same shall be removed without the permission of the health commissioner such occupant shall be subject to the penalty hereinafter provided.

The department of health shall have charge of the quarantine hospital, and shall have the power to employ such assistants and nurses as they may deem necessary, and it shall be their duty to see that the said hospitals are provided with suitable furniture, nourishment, fuel and medicines, and all persons sick or dying therein, or in other places under charge of the city who have not means to defray their own expense of sickness and burial shall be cared for or buried at the expense of the city.

In case of pestilential or epidemic disease, or of danger from anticipated or impending pestilence or epidemic disease, or in case the sanitary condition of the city shall be of such

a character as to warrant it, it shall be the duty of the said department of health to take such measures, and to do and order and cause to be done for the preservation of the public health (though not herein or elsewhere or otherwise authorized) as they may in good faith declare the public safety and health to demand.

The department of health may take such measures as they may, from time to time, deem necessary to prevent the spread of small pox, by issuing an order requiring all persons in the city or any part thereof, requiring vaccination, to be vaccinated within such time as they shall prescribe, and all persons refusing or neglecting to obey such order shall be liable to the penalty hereinafter provided. Providing, that it shall be the duty of the department to provide for the vaccination of such persons as are unable to pay for the same, at the expense of the city.

The department of health shall have the power to cause any house or premises to be cleaned, disinfected or closed to visitors, and prevent persons from resorting thereto while any person is laboring under any pestilential or infectious disease, they may, by an order, direct any nuisance to be abated, or unwholesome matter or substance, dirt or filth to be removed from any house or premises, and may prescribe the time and mode for doing so, and take any other measure they may deem necessary and proper to prevent the spread of any infectious, pestilential or epidemic disease, and any person who shall neglect or refuse to obey the orders, directions and instructions of said department of health, shall be subject to a penalty hereinafter provided.

Said department, whenever and at such times as they shall deem necessary, may, by proclamation (the approval of the city council being first had and obtained) require all boats, vessels, railroad cars or other public conveyances bound for this city, before the same shall land or stop at any wharf, depot or landing or stopping place therein, to touch or stop at any or either of the sites, places or boundaries so selected and established for quarantine purposes, and all such emigrants, travelers or persons, and all such sick, diseased or unclean persons, with their stores and baggage, as in the opinion of the officers stationed at such quarantine sites, places or boundaries, shall be deemed proper on account of the existence of or general report of small pox, cholera or any contagious diseases or disease apprehended to endanger the health of the city.

Whenever it shall be deemed necessary to issue such proclamation, it shall be the duty of said department to send the same, together with the substance of the regulations for quarantine and the period for which the same shall be in force, unless sooner revoked, to such cities and places as by them may be deemed proper.

They shall also cause to be stationed at such quarantine sites, places and boundaries, as they may deem advisable, one or more physicians or health officers, whose duty it shall be to go on board and examine all boats, vessels, cars or other public conveyances as aforesaid, required to touch or stop at such quarantine respectively, and then and there determine what emigrants, passengers or persons (if any) shall stop at such quarantine; and it shall be the duty of all persons, conducting or in any charge of such vessel, boat, car or public conveyance, to aid and assist any such physician or health officer in the exercise of his duty.

Said physician or health officer shall attend to all sick persons who may be landed or placed in quarantine, and provide medicine and necessaries for their use, and shall have general supervision of such quarantines and compel persons therein to purify their bodies, clothing and baggage, and do all such acts and things as shall be proper in the premises, keeping correct account of all expenditures and wages, which shall be allowed and paid by order of said department.

Whenever the physician or officer in charge of any quarantine station or place as aforesaid, shall, upon examination, be satisfied that there is no longer occasion for the detention of any boat, vessel, car or conveyance at such quarantine or place and such boat, vessel, car or conveyance shall have been thoroughly cleansed, and such persons as aforesaid landed and placed in the care of such physicians or officers, such physician or officer shall give such vessel, boat, car or conveyance a permit, signed by him, to enter the city, which shall be a complete authority for entry of said boat, vessel, car or conveyance and the said officer, respectively, shall discharge all persons in quarantine by their certificate for that purpose, whenever they are satisfied that such persons are free of the disease and their baggage and effects properly purified. *Provided*, however, that the department, in their discretion, by proclamation for that purpose, may, during the prevalence of cholera, ship fever, or other contagious or infectious diseases, forbid the admission of emigrants or others peculiarly liable thereto in any or all of said quarantine stations until, in their opinion, the health of the city will justify the same.

It shall be the duty of said department, whenever by them it shall be deemed necessary, to keep at the quarantine station or stations a sufficient force whose duty it shall be to enforce all regulations by this chapter required or by said department to be established, and to arrest all persons violating such regulations or committing any breach of peace, and bring such persons before any court having jurisdiction for trial, and to arrest and hold for trial all persons disobeying or interfering with or resisting any physician, health officer or other persons in authority at such quarantine sites, places or stations.

In case any boat, vessel, car or public conveyance shall leave any quarantine station, place or boundary without a permit as aforesaid, or shall fail to stop at the same, when as aforesaid required by the issuing of a proclamation, or whenever the person in charge thereof, or any person, under his command shall fail or refuse to obey any regulations or commands of the said department of health, physicians or persons in charge of any quarantine station or place, or of any provision or requirement of this chapter, the said department shall have the power, and it is hereby made their duty, if, in their opinion, the health of the city require it, to send sufficient police force to such boat, vessel, car or public conveyance and cause the same, with the crew and passengers on board, to be landed or stopped or conveyed to the quarantine station or place, and there to remain until properly discharged by the permit aforesaid; and the owner, master or person in charge of such boat, vessel, car or public conveyance, shall be liable to the city for all expenses and costs incurred by reason thereof. If any emigrants, travelers or persons so placed in quarantine as aforesaid shall leave the same without permission as aforesaid, they may be arrested and taken back to said quarantine and there retained until such permission shall be given.

Said department shall make such rules and regulations for the government of the

quarantine or health of the city from time to time as they shall deem necessary, and the physician or health officer in charge of any quarantine, station or place shall have power to make and enforce such regulations as may be necessary for the proper conducting and management thereof, and it shall be the duty of all persons in quarantine and all agents, officers, policemen or others employed by the city in and about such quarantine station and places, to carry out and obey the same.

The said department of health, by and with the approval of the city council, may appoint one or more competent physicians as quarantine physicians whenever the same shall become necessary by reason of the prevalence of any epidemic or pestilential disease, who shall be present at such quarantine stations as the said department of health shall designate, and attend to all duties imposed by this chapter or by the regulations of said department, and who shall receive each for actual services rendered, and for such times as such services shall be actually required, not less than five dollars nor more than ten dollars per day, to be allowed by said department; also, the said department may employ such agents, servants, nurses or temporary medical assistants for the purpose of carrying into effect the objects and intents of this chapter, or of any regulations, as in their judgment shall, from time to time, be necessary, or authorize the employment thereof by the physicians or health officers in charge of any quarantine station or place.

No person, master, captain or conductor in charge of any boat, vessel, railroad car or public conveyance, shall knowingly bring into the city any person diseased with cholera, smallpox, ship fever or contagious or infectious disease whatever; and no vessel, boat, car or public conveyance, at any time covered by the said proclamation, shall pass by any quarantine station or place, without stopping, nor shall leave the same without the permit aforesaid, and no person stopping in said quarantine, or so as aforesaid received therein, shall leave the same without first obtaining permission as aforesaid; nor shall any person aid or abet any master, conductor or person in charge of any boat, vessel, car or public conveyance, in violating, neglecting or evading any provisions or requirements of this chapter; nor shall any person interfere with, resist or refuse to obey the orders of any physician, health officer, policeman or other person in authority at any quarantine station or place of quarantine so as aforesaid established; nor do any act or thing in violation of or in disobedience to any of the provisions, clauses or sections of this chapter; nor shall commit any breach of the peace nor do any act calculated in any way to defeat or interfere with the provisions or requirements of this chapter, or of any regulations of the said department, physician or health officer in charge of any quarantine.

It shall be the duty of the commissioner of health to inspect any part of the city and its environs which, from its location or from any collateral circumstances, may be deemed the cause of disease, and in all cases where he may discover any agent, the existence of which will prove dangerous to the health of the city, and there is no ordinance competent to the correction of the evil, he shall immediately report the same to the department of health, accompanied with his opinion of the necessity of extraordinary or particular action.

The department of health, by and with the approval of the city council, may select, purchase, lease and establish such sites, places and boundaries for quarantine stations and purposes, and, with the approval of the city council, may erect from time to time, such buildings and hospitals upon such sites and places, and so keep the same in repair as in their judgment shall be deemed necessary.

Said department of health shall always have on hand, as far as practicable, a sufficient quantity of vaccine virus, and they shall provide to physicians who will vaccinate without charge all persons who may apply to them for that purpose, and shall give certificates of vaccination to children who have been vaccinated and require such certificate for admission to the public schools.

Any master of a vessel, conductor, captain or any person whosoever, who shall violate any clause, provision, requirement, duty or regulation of this act or any rule or regulation of the said department of health, or commissioner of health, or employee, in the discharge of their duty, or in charge of any quarantine; or any person whosoever, who shall fail or neglect to comply with any such clause, provision, requirement, duties or orders, or who shall interfere with or in any manner resist any officer or agent of the department of health of the city of Minneapolis, in the discharge of his duty as herein contemplated, or who shall commit any such breach of peace, or be guilty of any act or thing calculated to defeat or interfere with the carrying into effect any part of this act, or any regulation or order of said department of health or ordinance of said city in relation to the public health, shall, upon arrest and conviction by the municipal court of the city of Minneapolis, or the district court of the county of Hennepin, be subject to a fine not to exceed one hundred dollars (\$100), nor less than ten dollars (\$10) for each offense, together with costs of prosecution.

Said department of health may order or cause any excavation, erection, vehicle, vessel, water craft, room, building, place, sewer pipe, passage, premises, ground, matter or thing in the city of Minneapolis, or adjacent waters, regarded by said department as in a condition dangerous or detrimental to life or health, to be purified, cleansed, disinfected, altered or improved, and may also order any substance, matter or thing, being or left in any street, alley, water, excavation, building, erection, place or grounds (whether such place where the same may be private or public) and which said department may regard dangerous or detrimental to life or health, to be speedily removed, and may designate or provide a place to which the same shall be removed, when no such adequate or proper place, in the judgment of said department, is already provided.

It shall be the duty of the said department of health to aid in the enforcement of and as far as practicable to enforce all laws of this state applicable within the limits of the city of Minneapolis to the preservation of human life or to the care, promotion or protection of health, and said department may exercise the authority given by the laws aforesaid to enable them to discharge the duties herein imposed; and this section is intended to include all laws relative to cleanliness and to the use or sale of poisonous, unwholesome, deleterious or adulterated drugs, medicines or foods. And said department is authorized to require reports and information at such times and of such facts, and generally of such nature and extent relating to the safety of life and promotion of health as its by-laws and rules may provide, from all dispensaries, hospitals, asylums, infirmaries, prisons and schools and from the managers, principals and officers thereof: and from all other institu-

tions, their officers and managers, and from the proprietors, managers, lessees and occupants of all theatres and other places of public resort or amusement in said district; and it is hereby made the duty of the officers, institutions and persons so called on or referred to promptly to give such reports verbally or in writing, as may be required by said department.

That the said department of health is hereby authorized and it shall be its duty to make such rules and recommend such ordinances as to them may seem necessary and proper, for the purpose of compelling all physicians practicing within the limits of the city of Minneapolis, to make reports of all cases of contagious diseases upon which they may be in attendance; and all keepers of boarding or lodging houses, all inn-keepers and hotel keepers, to make report of all cases of contagious diseases occurring within their respective houses, and generally to make such regulations and rules as to them may be deemed necessary for the carrying into effect the objects of this section of obliging reports of contagious diseases to be made to said department of health by all persons becoming cognizant of the same.

And the said department of health is hereby authorized and it shall be its duty to make rules or recommend ordinances regulating the interment and removal of dead bodies, their entry into, removal from, and passage through the said city of Minneapolis and no body shall be buried or exhumed within the limits of the said city of Minneapolis, removed therefrom or received therein, to pass through the said city without a written permit first obtained from the said department of health, and to be issued in the manner and under the conditions by them prescribed, and the said department of health shall make all rules and regulations necessary for carrying out the objects of this section.

That the jurisdiction of the city of Minneapolis shall extend to and prevail over all cemeteries under the control of organizations established in said city, and it shall be the duty of the department of health to make such rules and regulations as may be deemed necessary regarding the reception and interment of dead bodies within the same, and prescribe the duties of all sextons and keepers of such cemeteries relative to the reception and burial of dead bodies.

The jurisdiction of the department of health of the city of Minneapolis shall extend over all lakes and water courses of the county of Hennepin, to the same extent as within the limits of said city.

Said commissioner of health shall annually, on or before the first day of January, present to the mayor and city council, a thorough and comprehensive statement of all matters pertaining to said department during the year, and of all expenditures from the appropriation for the health department, together with a statement in detail of the appropriations required by the department during the next municipal year.

RULES AND REGULATIONS

OF THE

DEPARTMENT OF HEALTH,

MINNEAPOLIS, MINN.

CITY OF MINNEAPOLIS, MINN., July 15, 1889.

In pursuance and by virtue of the authority granted by an act of the legislature of the state of Minnesota, entitled, "An act relating to the reorganization of the health department and preservation of the public health of the city of Minneapolis, Minnesota," approved April 22, 1889, the department of health of the city of Minneapolis, in the county of Hennepin and state of Minnesota, does hereby make the following rules and regulations which the said department deems necessary for the government of the quarantine and health of the said city of Minneapolis.

FOOD AND DRINK.

SECTION 1. No meat, fish, game, fowl, fruit, vegetables, milk, or any other article of food or drink, or intended for human consumption, the same being then unhealthy, stale, unsound, tainted, putrid or unwholesome, and no meat of any beast, fish, game or fowl that has died by disease or accident, shall be brought within, or carried from place to place, or kept or offered for sale, as or for such food or drink, in any public or private market, store, shop or place within the corporate limits of the city of Minneapolis.

SEC. 2. It shall be the duty of every person who has knowledge that any meat, fish, game, fowl, fruit, vegetables, milk or any other article of food or drink, are brought within, kept or offered for sale in said city, when in an unhealthy, stale, unsound, tainted, putrid, or unwholesome condition, to report the fact of such knowledge and all the particulars relating thereto to the department of health of said city. It shall be the duty of the commissioner of health to examine, and if necessary, to condemn, seize and confiscate all such meat or other provisions wheresoever within said city they may be found. *Provided:* That such seizure and confiscation shall in no wise exempt any offending party from the penalty prescribed in these rules and regulations.

SEC. 3. No person shall bring or send into, or deliver, keep or offer for sale or for use as food for human consumption, within said city, any unwholesome, skimmed, watered or adulterated milk, or any milk known as "swill-milk," or that has been obtained from cows or other animals that are sick or diseased, or that have been fed upon swill.

SEC. 4. It shall be the duty of every person who is the owner of, agent for, or occupant of any room, store, stall or place within said city, in which any meat, fish, game, fowl, fruit, vegetables, milk or any other article of food or drink are stored, kept or offered for sale, to put and keep such room, store, stall or place, and all the appurtenances thereof, in a clean and wholesome condition.

SEC. 5. No calf which has been killed when less than four weeks old, or pig which has been killed when less than five weeks old, or lamb which has been killed when less than eight weeks old shall be brought into, kept or offered for sale within said city.

SEC. 6. No dead animal, above the size of a rabbit, nor any meat thereof shall be taken to or exposed for sale, as food, in any public or private market within said city, until same shall have been fully cooled after having been killed and until all blood shall have ceased dropping therefrom and until the entrails, head (unless the same has been skinned), hide, horns and feet shall have been removed, and no gut-fat or any other unwholesome or offensive matter or thing shall be brought to or near any such market.

SEC. 7. No cattle shall be confined or kept in any place within said city, in which the supply of fresh air, water and food is insufficient for the preservation of their health and wholesome condition as human food.

SEC. 8. No manager, keeper or employee of any saloon, restaurant, hotel or boarding house, within said city, shall keep, offer or serve, for food or drink, any poisonous, deleterious or unwholesome substance or thing.

SEC. 9. No person shall keep, use, serve, or offer for use or sale as a beverage within said city, any poisonous, adulterated or deleterious liquid or liquor.

SEC. 10. No person shall put or place or allow to run or pass into any source of drinking water or into any hydrant, well, font or water pipe used for the conveyance of the same, within said city, any dirty, poisonous or noxious substance or any animal or vegetable matter; nor shall any person do, or permit to be done (having right or power to prevent the same) any act or thing which will impair or imperil the purity or wholesomeness of any water or other fluid used, or designed to be used as a drink within said city.

CONTAGIOUS DISEASES, ETC.

SEC. 11. No person or persons shall introduce or aid in introducing, into said city, any person sick with, or any person or thing infected with Asiatic cholera, yellow fever, typhus or typhoid fever, smallpox, scarlet fever, measles, diphtheria or any other contagious or infectious disease.

SEC. 12. It shall be the duty of any and every physician who is called to attend any case of Asiatic cholera, yellow fever, small pox, scarlet fever, measles, diphtheria, typhus or typhoid fever within said city, to notify the department of health of said city in writing, within twenty-four hours after his first visit thereto or after he has first seen or prescribed therefor, of the existence of such disease and of the date of its appearance together with the name and residence of the person affected therewith. Subsequent cases of contagious disease which may occur in the same family or at the same residence while the same is under quarantine regulations shall each and all be reported in similar manner to the said department of health by the physician in attendance upon said cases.

SEC. 13. It shall be the duty of every proprietor, manager, superintendent, principal, owner, agent or other person in charge of any hotel, boarding house, boarding school, tenement house or other place of residence, or of any hospital, asylum or other public institution within said city, in which any contagious or infectious disease may be discovered, to give immediate notice to the department of health of said city of the existence therein of such contagious or infectious disease, and of the name or names of the person or persons affected therewith.

SEC. 14. No parent or guardian of any minor child shall permit such child, if affected with any contagious or infectious disease, or any other child or children of the same family, or resident in the same house in which said child so affected may be living, to attend any private or public day school, night school or Sunday school within said city.

SEC. 15. It shall be the duty of any principal or teacher in charge of any private or public school, day school, night school or Sunday school, within said city, to report to the department of health the name and residence of any child who, being affected with any contagious or infectious disease, shall present him or herself for attendance at such school to cause such child so affected to return home immediately, and to exclude from attendance at such school any child so affected, and any other child or children who may belong to the same family, or live in the same residence as that to or at which such child so affected may belong or reside, until such time as the said department of health shall issue a written permit providing for the re-admission of such child or children to said school.

SEC. 16. It shall be the duty of any person who may know of any case of contagious or infectious disease within said city, which he shall have reason to believe has not been reported to the department of health, to report immediately to the said department the name (if known) and the place of residence of the person affected with such disease, together with a statement of the name and nature of his or her disease.

SEC. 17. No person shall carry or remove, or aid in carrying or removing, or cause to be carried or removed from one building or place to another, or to or from any vehicle, within said city, any person who is sick with small pox or any other contagious or infectious disease without having first obtained a permit so to do from the department of health of said city.

SEC. 18. It shall be the duty of every physician who is attending any person or persons affected with any contagious or infectious disease (as enumerated in section 13 of these rules and regulations) to report promptly to the department of health of said city the recovery or death of such person or persons so affected, and to certify to said department that the house in which such person or persons have been quarantined has been thoroughly disinfected, together with the date of such disinfection.

SEC. 19. Whenever quarantine has been established by the department of health upon or in any house within said city in which any contagious or infectious disease exists, by a placard affixed to such house, such quarantine and all the provisions thereof shall be maintained until the recovery or death of the person or persons affected with any such disease has been reported to the said department, and until the said house has been thoroughly disinfected, and until such disinfection has been approved and such placard

removed by said department. In the event of the occurrence of scarlet fever, the quarantine shall extend over a period of not less than three weeks from the date of the appearance of such disease.

Two weeks after the disinfection of any such house so quarantined has been approved and such quarantine has been released by the department of health of said city, a written permit may be issued by said department authorizing the return and re-admission to school of any child or children resident in such house; provided: That no other case or cases of contagious or infectious disease shall have appeared in such house in the meantime.

SEC. 20. No parent, guardian or custodian of any minor child within said city shall permit such child to be unnecessarily exposed to contagion or infection from any contagious or infectious disease.

SEC. 21. It shall be the duty of every parent, guardian or custodian of any minor or other individual within said city to cause and procure such minor or other individual to be promptly, frequently and effectively vaccinated.

SEC. 22. No principal, teacher or other person in authority over any public or private school, academy, college or university within said city shall permit any pupil or student to enter or be enrolled in such school, academy, college or university unless he or she shall present a certificate of vaccination, signed by some physician in actual practice within said city, and the said certificate of vaccination shall be preserved and recorded by such principal, teacher or other person in authority.

DEATHS, BURIALS, CEMETERIES, ETC.

SEC. 23. It shall be the duty of every physician within said city, who shall be in professional attendance upon any person at the time, or within 12 hours of the time of the death of such person, to furnish promptly to the department of health of said city, a certificate, written in ink, setting forth the date of such death, the full name, the age, the sex, the color, the social state, the occupation, the place of birth, the place of death, the true and recognized cause of death, the duration of the disease which has caused such death, the length of residence in the city and state, and the names and birthplaces of the parents of such person, together with the place of proposed interment of such dead person, and name (if known) of the undertaker who will have charge of such interment.

In the event of any death occurring within said city, from any contagious or infectious disease, it shall be the duty of the physician in attendance upon the same to furnish to the department of health of said city a written certificate of death, as described above, within 12 hours of the time of such death.

In the event of the occurrence of the death of any person within said city, upon whom no physician has been in professional attendance at the time of or within twelve hours preceding such death, a similar written certificate, as above described, shall be furnished and signed by the coroner.

SEC. 24. No person shall retain or allow to be retained, unburied, the dead body of any human being within said city for a longer time than three days after the death of such human being, without having obtained a written permit so to do from the department of health of said city, which permit shall specify the length of time during which such dead body may be retained unburied.

Provided: That in case such dead person shall have died of Asiatic cholera, yellow fever, smallpox, scarlet fever, measles or diphtheria, the body of such person shall be buried within twenty-four hours after death.

SEC. 25. It shall be the duty of any and every person who has discovered or seen, or who knows of the whereabouts within said city of the dead body of any human being, or of any part thereof (if such person has reason to believe that the fact of the death or of the existence or whereabouts of such dead body or of such part thereof is not known to the department of health of said city) to communicate immediately to said department the fact of such discovery, the place wherein and the time when such dead body or part thereof was discovered or seen, and the place where the same is or may be found, and any facts known to such person by which the same may be identified or the cause of death thereof ascertained.

SEC. 26. No undertaker, or other person, shall remove for burial, shipment or for any other purpose, whether scientific or otherwise, the dead body of any human being, within said city, or to or from said city, without first presenting to the department of health of said city a certificate of death (in accordance with the provisions of section twenty-four of these rules and regulations) signed by a legally practicing physician or by the coroner of the county and without obtaining therefrom a written permit to do so.

No interment or deposit of the dead body of any human being, or any other disposition thereof in any tomb, grave, vault or cemetery shall be made, within said city, without a written permit to inter, deposit or otherwise dispose of the same has first been granted by the said department of health; and no sexton or any other person shall assist in, countenance or allow any such interment or deposit of any such dead body unless such permit has been granted therefor by the said department.

SEC. 27. No physician, medical student or professor in any medical college or university or any other person within the said city shall use, obtain or receive any dead body of any human being, for dissection or for any other scientific purpose, excepting for autopsy immediately after death, which has died of Asiatic cholera, yellow fever, typhus fever, smallpox, scarlet fever, measles or diphtheria. It shall be the duty of the demonstrator of anatomy of any medical college or university, before using or receiving any dead human body for dissection or any other scientific purpose, within said city, to certify to the department of health of said city the name and nature of the disease of which said human body has died and to obtain or cause to be obtained from said department a permit of burial for such body, and to preserve or cause to be preserved the remains of such dead body and to bury or cause the same to be properly buried in the cemetery or burying ground indicated in such permit.

SEC. 28. It shall be the duty of every sexton, superintendent of a cemetery, or other person in charge of any cemetery or burying ground within said city, to receive the permits issued for burials in said cemetery or burying ground, to preserve the same and to furnish to the department of health of said city, upon Monday of each week, a written report, upon blank forms to be furnished upon application by said department, of all burials made or caused to be made by him.

SEC. 29. It shall be the duty of the undertaker, near relatives or any other person having charge of the funeral or burial of the dead body of any person within said city, who has died of Asiatic cholera, yellow fever, typhus fever, typhoid fever, smallpox, scarlet fever, diphtheria, measles or any other contagious or infectious disease, to keep such funeral strictly private and to permit no other person or persons excepting the immediate members of the deceased person's family who are residents at the place of death, and the officiating clergyman or minister, to be present thereat; and to convey such dead body directly from the place of death to the place of burial and in no other vehicle than a hearse.

SEC. 30. It shall be the duty of the undertaker, near relatives and of any other person or persons within said city who shall have charge of the burial or shipment, or of the preparations for the burial or shipment of the dead body of any person who has died of any contagious or infectious disease to observe and obey the following rules and regulations embodied in this section.

(a) The dead body of any person who has died of any contagious or infectious disease shall be thoroughly disinfected, and shall not be exposed to the view of any person who is not necessarily engaged in the preparation of the same for burial.

(b) The dead body of any person who has died from any contagious or infectious disease shall not be placed or kept in any receiving vault, in any cemetery or burying ground, unless such dead body shall be first enclosed in a hermetically sealed, zinc-lined or other metallic casket, and unless a written permit so to do has first been obtained from the department of health of said city.

(c) No dead body of any person who has died of Asiatic cholera, yellow fever, typhus fever or small pox, shall be shipped or carried into or from said city by any means or conveyance whatsoever.

(d) In preparing for shipment the dead body of any person who has died of scarlet fever, measles, diphtheria or typhoid fever, the said body shall be wrapped in a sheet saturated either with a solution of bichloride of mercury, of a strength of one part in two thousand, or with a solution of carbolic acid, of the strength of one part in forty. The said body shall then be enclosed in a tightly sealed casket and said casket shall then be placed in a zinc-lined box. The spaces above and beneath said casket and between said casket and zinc-lined box shall be filled with sawdust which has been previously saturated with a solution of bichloride of mercury, of the strength of one part in two thousand, or with a solution of carbolic acid, of the strength of one part in forty. The zinc-lined box shall then be hermetically sealed.

(e) No person who has been exposed to contagion or infection from the dead body of any person who has died of any contagious or infectious disease either before or after death, shall be permitted to accompany the remains of such dead person in their removal to or from said city.

SEC. 31. No grave, tomb, vault or other receptacle in which any dead body has been placed, shall be opened within said city for the purpose of exhuming or removing such dead body, unless a written permit so to do has been granted by the department of health, which permit shall dictate any precautions to be observed in so doing, which the said department may deem necessary for the preservation of the public health.

SEC. 32. Every grave in which any dead body shall be buried within said city shall be dug to a depth of not less than six feet below the surface of the ground and of not less than four feet below the grade of any closely adjacent street.

SEC. 33. No new cemetery, burying ground, vault or tomb, for the reception and burial of dead human bodies, shall be established within said city or under the control of any organization within said city, without a permit so to do shall first have been granted by the department of health of said city.

SEC. 34. It shall be the duty of every person who acts as an undertaker or as a sexton or superintendent in charge of any vault, tomb, burying ground or cemetery, for the reception and burial of human dead, within said city, to cause his or her name, place of residence and the title of his or her office to be registered at the office of the Department of health.

DISEASED AND DEAD ANIMALS.

SEC. 35. Every veterinary surgeon who is called to examine or attend professionally any animal within said city which has, or is suspected of having, glanders, or farcy, or pleuro-pneumonia, or hydrophobia, or any other dangerous or communicable disease, shall report in writing to the department of health of said city, within twenty-four hours after his first visit thereto, the location of such diseased animal, the name and address of the owner thereof, and the nature of the disease or suspected disease affecting such animal.

SEC. 36. No person shall buy, sell, keep or cause to be kept within said city, any horse, ass, colt, or any other animal which is sick with either of the diseases known as glanders, or farcy, or pleuro-pneumonia, or hydrophobia. It shall be the duty of any person owning, keeping or caring for, or knowing of any animal affected with glanders, or farcy, or pleuro-pneumonia, or hydrophobia, to report the fact and the whereabouts of such animal promptly to the department of health of said city.

SEC. 37. Any animal which is diseased with glanders, or farcy, or pleuro-pneumonia, or hydrophobia within said city, and which has been condemned by the department of health of said city, shall be immediately quarantined, and shall be killed and removed so soon and in such manner as the said department shall direct.

SEC. 38. No diseased or sickly horse, cattle, swine, sheep, dog or cat or any other animal, and no animal which has been exposed to any disease which is contagious or infectious among animals, shall be brought into or exposed in any street, alley or public place in said city.

SEC. 39. No person shall abandon or leave in any street, alley, lot or other public place within said city any sick or injured horse or other animal. It shall be the duty of the owner of such sick or injured animal to make provision for the care and shelter of the same, or, if such sick or injured animal shall be adjudged past recovery, to kill or cause the same to be killed and removed under the rules and regulations of the department of health of said city.

SEC. 40. Any person who shall know of any sick or injured animal which has been abandoned or left, or which has been found upon any street, alley, lot or public place

within said city without an owner, shall immediately notify the department of health of said city of the fact and of the whereabouts of such animal.

SEC. 41. Any sick or injured animal found or abandoned upon any street, alley, lot or public place within said city without an owner, which is adjudged by the department of health of said city, and by any veterinary surgeon summoned by said department, to be past recovery, shall, after an interval of two hours, if unclaimed and uncared for by the owner thereof, be killed and removed by order of said department.

SEC. 42. No person shall deposit or cause to be deposited upon any lot or in any street, alley, lake or river or other body of water, or bury or conceal in any way, within said city, any dead animal or part thereof. It shall be the duty of any owner or other person having charge of any animal at the time of its death, to remove or cause to be removed the dead body of such animal, within six hours after death, to the crematory, dump, licensed rendering factory or any other proper place, within said city, designated by the department of health.

NUISANCES.

SEC. 43. No owner of, agent for, or occupant of any house, store, hotel, restaurant, market or stable, nor any other person, shall accumulate, throw or deposit, or cause to be thrown or deposited, or shall pass or allow to be passed into or upon any street, alley, lot, vacant place, sidewalk, catchbasin, manhole, gutter, pond, lake, river, creek or other body of water, or upon the banks thereof within said city, any animal or vegetable matter, garbage, swill, slops, offal, butcher's waste, store sweepings, street sweepings, rubbish, refuse, manure, straw, hay, animal beddings, ashes, night soil, sewage sludge, contents of cesspools or privy vaults, or any other nauseous or unwholesome substance, fluid, or thing.

SEC. 44. It shall be the duty of the owner, manager, proprietor, agent or occupant of any house, store, hotel, restaurant, saloon, or stable, within said city, to provide watertight boxes, barrels, buckets or other suitable receptacles for the reception of garbage, offal, ashes, manure and other refuse and to place the same upon the premises such persons may own, occupy or control in a situation as remote as possible from any surrounding dwellings, and not less than 50 feet from any adjacent street; and to empty and cleanse the same or cause the same to be emptied and cleansed as often as may be necessary to prevent such receptacles or the contents thereof from becoming a nuisance, or as often as the department of health of said city may direct.

SEC. 45. It shall be the duty of every proprietor, manager or tenant of any market, commission house, butcher shop, fruit store, restaurant, eating house, boarding house or hotel within said city to make provision for and to secure the daily removal of all garbage, offal or refuse which may accumulate therein, and to keep such house, store, restaurant or hotel, at all times free from offensive odors or nuisances.

SEC. 46. No person shall throw into any privy vault, sink or cesspool within said city any garbage, offal, swill or other household refuse; nor shall any person discharge, or cause to be discharged, into any privy vault the slops or water running through or from any sink or drain-pipe within any dwelling or other building.

SEC. 47. It shall be the duty of the owner, agent or occupant of any house, store, factory or other building or premises within said city, upon or in connection with which any privy vaults or cesspools are maintained, to make and keep such privy vaults and cesspools watertight and in good repair to empty to the bottom and to cleanse and disinfect the same whenever said privy vaults or cesspools shall be or become nauseous, offensive or dangerous to the public health, or whenever the department of health of said city may adjudge such emptying, cleansing and disinfecting to be necessary and order the same to be done.

SEC. 48. It shall be the duty of every owner of or agent for any house, store, hotel, factory or other building within said city, to make connections, agreeably to the provisions of the plumbing ordinance of said city, between such building and the public sewers of said city, whenever such sewers exist in the immediately adjacent or abutting streets and whenever the department of health of said city shall order such sewer connection to be made. And, in the absence of such sewers in the immediately adjacent or abutting streets, it shall be the duty of the owner of or agent for such building to make or cause to be made a cesspool in connection with such building whenever the department of health of said city shall consider the same necessary, and shall order the same to be done, and in such location and of such dimension as the building inspector shall direct.

SEC. 49. It shall be the duty of the owner, agent or occupant of any house, store or other building within said city, in which any drain-pipe, soil-pipe or passage exists in connection with any sewer or cesspool, to make and to keep such drain-pipe, soil-pipe or passage adequate for its proper purposes and free of any obstruction to the passage of such materials that may or should be put or discharged into the same.

SEC. 50. No person shall own, conduct or engage in the business of tanning, skinning, scouring or dressing hides and leather, or in the business of glue making, or of rendering, boiling, heating, steaming, grinding or crushing animal or vegetable waste matter, meat, fat, bones or garbage, or in any other business which shall be nauseous, offensive or dangerous to the public health, within said city, without having first obtained a written permit or license so to do from the department of health of said city, and then only in such place or places and under such conditions as the said department may require. Failure upon the part of such person or persons, engaged in such business, to comply with the aforesaid conditions, shall subject such person or persons to a revocation of such permit or license at any time thereafter by the said department.

SEC. 51. It shall be the duty of every owner, agent or occupant of any building or any part thereof, within said city, which has been or shall be condemned by the department of health of said city as unfit for human habitation by reason and account of its infection with any disease or of its being subject to the influence of any nuisance which is adjudged by said department to be dangerous to human life or health, to vacate such building or part thereof within such reasonable time as may be specified in a written notice to such effect, which shall be served by said department upon such owner, agent or occupant of said building.

SCAVENGER SERVICE, ETC.

SEC. 52. No person shall remove or cause to be removed, cleaned or carried within said city, the contents of any privy vault or cesspool or any offal, butcher's waste, garbage, swill, rough tallow or slaughter house refuse, or any carcass of any dead animal without having first obtained a written permit so to do from the department of health of said city, and it shall be the duty of such person to comply with all the requirements and conditions of such permit.

SEC. 53. No person shall perform any scavenger service by means of either carts or tanks within said city between the hours of midnight on Saturday and of midnight on Sunday; and no person shall remove the contents of any vaults or cesspools by means of carts within said city between the hours of five a. m. and ten p. m. on each week day without a special permit so to do.

SEC. 54. It shall be the duty of every owner, keeper or driver of any scavenger cart, tank or vessel within said city to make and keep the same water-tight, covered and clean, and to wash and disinfect every such cart, tank or vessel which is used for the conveyance of night soil or cesspool filth, at the dump or in the river adjacent thereto, each time and immediately after the same is emptied.

SEC. 55. It shall be the duty of every owner, keeper or driver of any scavenger cart, tank, vessel or tools within said city to keep the same when not in actual use in a suitable barn, stable, shed or other complete inclosure, and no such cart, tank, vessel or tools shall be permitted to stand on or to remain upon any street, alley or lot when not in actual use.

SEC. 56. It shall be the duty of every owner, keeper or driver of any scavenger cart or tank within said city to submit the said cart or tank for inspection to the department of health of said city at least once in each month, and if the condition of the said cart or tank is not approved by said department, it shall be the duty of such owner, keeper or driver to keep the same out of service until it is cleaned, altered or repaired.

SEC. 57. No person engaged in the removal of any refuse of whatever kind within said city shall permit or cause the same to be piled up or raked together in any street or public place for a longer time than four hours.

SEC. 58. It shall be the duty of every person who is engaged in the removal, loading or unloading, or conveyance, within said city, of any contents of any privy vault or cesspool, or of any offal, butcher's waste, garbage, swill, slaughter house refuse, street sweepings, or of any other filthy or offensive substance, to do the same neatly and with dispatch, and to avoid all unnecessary offense in so doing.

SEC. 59. No person shall permit or cause any vehicle carrying the contents of any privy vault or cesspool, or any offal, garbage, swill or other filthy or offensive substance, within said city, to stand or remain before or near any building or residence or upon any street, alley, lot or other public place for any longer time than is actually required in the loading, conveyance and unloading of such materials.

SEC. 60. It shall be the duty of every owner, keeper or driver of any scavenger cart, tank or vessel, within said city to keep such cart, tank or vessel in good repair, to avoid overloading the same or spilling its contents, and to keep a close cover over such cart, tank or vessel while driving the same upon the public streets and alleys, and if any of the contents thereof shall be spilled or fall upon any street, walk or premises, it shall be the duty of such owner, keeper or driver to replace the same immediately and remove all traces thereof.

SEC. 61. No person shall obstruct, delay or interfere with the proper and free use of the crematory and dumps within said city, or resist the keepers thereof in the proper discharge of their duties.

PENALTIES AND PUBLICATION.

SEC. 62. Any person whosever who shall violate any clause, provision, requirement or duty of these rules and regulations of the said department of health, or of the Commissioner of health, in the discharge of duty or in charge of any quarantine; or any person whosever who shall fail or neglect to comply with any such clause, provision, requirement, duty or orders, or who shall interfere with or in any manner resist any officer or agent of the department of health of the city of Minneapolis in the discharge of his duty, as herein contemplated, or who shall commit any such breach of peace, or be guilty of any act or thing calculated to defeat or interfere with the carrying into effect any regulation or order of said department of health, shall, upon arrest and conviction thereof before the municipal court of the city of Minneapolis, or the district court of the county of Hennepin, be subject to a fine not to exceed one hundred dollars (\$100), nor less than ten dollars (\$10) for each offense, together with costs of prosecution.

SEC. 63. The foregoing rules and regulations of the department of health of the city of Minneapolis shall take effect and be in force from and after the publication of the same in the official paper of the said city.

OFFICE OF THE DEPARTMENT OF HEALTH, }
MINNEAPOLIS, MINN., July 15, 1889. }

We hereby certify that the foregoing rules and regulations, severally and as a whole, were adopted by the department of health at a meeting held on the 15th day of July, 1889, and the publication of the same was ordered to be made in the Minneapolis Evening Star, it being the official paper of the city of Minneapolis, Minnesota.

Signed: E. C. RABB,
Mayor.

ALDERMAN H. W. BRAZIE,
ALDERMAN E. G. POTTER,
ALDERMAN J. C. STERLING.

Secretary.

S. S. KILVINGTON, M. D.,
Chairman and Commissioner of Health.

[L. S.]

STATE OF MINNESOTA, }
 County of Hennepin. } ss.

On this, the fifteenth day of July, 1889, before me, the undersigned, a notary public in and for said county of Hennepin, personally appeared E. C. Babb, mayor; Alderman H. W. Brazie, Alderman E. G. Potter, Alderman J. C. Sterling, S. S. Kilvington, Commissioner of Health, to me well known, and having subscribed their names to the foregoing affidavit and been duly sworn, said that the foregoing rules and regulations, severally and as a whole, were adopted by the department of health at a meeting held on the 15th day of July, 1889, and that the publication of the same was ordered in the Minneapolis Evening Star, the official paper of the city of Minneapolis, and that the same is true of their own knowledge.

CHAS. F. HANEY.

Notary Public, Hennepin County, Minn.

CLARIBEL S. BARD, }
 CHAS. F. HANEY, } Witnesses.

STATE OF MINNESOTA, }
 County of Hennepin. } ss.

Came personally before me, Meinardt H. Garrels, and being duly sworn, doth depose and say, that he now is, and during all the time hereinafter mentioned, has been the foreman and printer of the Minneapolis Evening Star, a daily newspaper of general circulation, printed and published in the city of Minneapolis, in said Hennepin county. That he knows of his own knowledge that the printed notice hereto attached, cut from the columns of said paper, was inserted, printed and published in said newspaper once, and that said publication was made in the English language. That said notice was inserted, printed and published in said newspaper on Tuesday, the 16th day of July, 1889, and that said newspaper was published daily and generally circulated in said Hennepin county for more than one year next preceding the date of the publication of said notice.

M. H. GARRELS.

A. D. 1889.

E. T. BENNETT,

Notary Public, Hennepin County, Minn.

Subscribed and sworn to before me this 17th day of July, A. D. 1889.

ANNUAL REPORT

OF THE

JUDGES OF MUNICIPAL COURT,

Of the City of Minneapolis.

MUNICIPAL COURT.

GEORGE D. EMERY,	-	-	-	Judge.
STEPHEN MAHONEY,	-	-	-	Special Judge.
H. J. ALTNOW,	-	-	-	Clerk.
ED. A. ALLEN,	-	-	-	Deputy Clerk.
OSCAR J. SMITH,	-	-	-	Deputy Clerk.
THOMAS NEWLOVE,	-	-	-	Stenographer.

COURT OFFICERS DETAILED FROM POLICE FORCE.

WASHINGTON PIERCE,	-	-	-	Sergeant.
JOHN C. CAMPBELL,	-	-	-	Court Officer.
JOHN BYRNES,	-	-	-	Court Officer.
PHILLIP T. MEGAARDEN,	-	-	-	Court Officer.
JOHN B. SCHWAB,	-	-	-	Court Officer.
W. EHRLICHMAN,	-	-	-	Court Officer.

ANNUAL REPORT

OF THE

JUDGES OF MUNICIPAL COURT,

MINNEAPOLIS, MINN.

MINNEAPOLIS, MINN., January 1, 1890.

To the Honorable the City Council of the City of Minneapolis:

GENTLEMEN—In accordance with your request we herewith submit a statement of the business of the Municipal court for the year 1889:

CRIMINAL.

Convictions of petty offenses.....	4,785
Held to grand jury.....	274
Tried or examined and <i>discharged</i>	639
Committed to workhouse.....	1,997
Committed to county jail.....	40
Committed to reform school.....	28
Paid fines.....	2,024
Committed to city hospital.....	1
Bound over to keep the peace.....	5
Sentence suspended <i>before</i> commitment.....	690
Sentence suspended <i>after</i> commitment.....	183
Forfeited bail—paid bar association.....	\$560.00
Total fines collected and paid city.....	33,349.40

CIVIL.

Number of suits entered during the year.....	2,620
Amount of fees collected and paid city.....	\$5,424.08
Total amount paid city.....	\$38,773.48

The Following Table Shows the Distribution of Business by Months.

MONTH, 1889.	Fines.	Fees.	Total Receipts
January.....	\$1,117.00	\$348.58	\$1,465.58
February.....	1,338.35	455.23	1,793.58
March.....	1,201.45	373.79	1,575.24
April.....	1,674.70	328.75	2,003.45
May.....	2,595.35	308.65	2,904.00
June.....	2,727.00	417.03	3,144.03
July.....	3,752.12	301.97	4,054.09
August.....	3,585.88	287.20	3,873.08
September.....	3,432.05	733.03	4,165.08
October.....	4,616.00	544.07	5,160.07
November.....	3,935.75	755.45	4,691.20
December.....	3,373.75	570.33	3,944.08
Total.....	\$33,349.40	\$5,424.08	\$38,773.48

As now constituted, the court consists of two judges, one clerk and two deputies and one stenographer, with one sergeant and five officers for special service.

On the civil side regular terms are held on the first and third Tuesdays of every month, July and August excepted. Special terms are held every Tuesday throughout the year. Its jurisdiction extends to all suits at law where the amount in controversy does not exceed five hundred dollars. It has no jurisdiction in equity cases nor suits involving the title to real estate nor for divorce.

On the criminal side it has the general jurisdiction of a justice of the peace and exclusive jurisdiction of all offenses against the city ordinances. It is open every day except Sundays and legal holidays.

The general practice is the same as in the District courts, and a jury is in attendance on the second day of every general term and remains as long as needed.

The business of the court has constantly increased ever since its organization. During the year just past it exceeded that of the preceding year by over one-half—a larger proportionate gain than heretofore.

If this rate of increase is maintained for two years more the judicial and clerical force will need to be increased or the business will be retarded.

Respectfully submitted,

GEO. D. EMERY,

Municipal Judge,

STEPHEN MAHONEY,

Special Judge.

ANNUAL REPORT

OF THE

SUPERINTENDENT OF WORK HOUSE,

Of the City of Minneapolis.

WORK HOUSE COMMITTEE OF CITY COUNCIL.

JOHN C. STERLING, Chairman,	
HERMAN VOGT,	BENJ. H. BILLINGS,
HENRY W. BRAZIE,	GEO. H. WARREN.

OFFICERS.

JOHN WEST, - - - -	Superintendent.
MICHAEL WHELAN, - - - -	Deputy.
GEO. P. DODD, - - - -	Hall Master.
MAX WOLFGANG, - - - -	Engineer.
JULIUS MYWALD, - - - -	Ass't Engineer.

GUARDS.

COLIN BUCHANAN,	W. K. WHITE,
JOHN COURTNEY,	ANDREW SANDBERG,
H. E. STROUT.	
JOHN BECK, Night Watch.	WM. WEST, Driver.
JOHN HARRINGTON, Cook.	LINCOLN G. HOWE, Gardner.
ANGIE TAYLOR, Matron.	

ANNUAL REPORT
OF THE
SUPERINTENDENT OF WORKHOUSE,
MINNEAPOLIS, MINN.

OFFICE OF THE SUPERINTENDENT OF WORKHOUSE, }
MINNEAPOLIS, MINN., January 8, 1890. }

To the Honorable City Council of the City of Minneapolis:

GENTLEMEN—I have the honor to submit for your consideration my annual report as superintendent of the Minneapolis workhouse for the year ending December 31, 1889, being the fourth annual report. In so doing, I take pride in the fact that our record will compare favorably with that of any similar institution, as will be more apparent from the detailed statements and exhibits accompanying this report.

LABOR OF INMATES.

Having been elected by your honorable body on January 9, 1889, I resumed the duties of superintendent three days later, when I found 119 inmates, ninety-nine of whom were males and twenty females, all of whom (as stated in the report of my predecessor) were absolutely idle, save such as were engaged in the routine labor of the prison. My first endeavor was to find some kind of labor for all able to work in which I was cordially aided by your committee on workhouse (Aldermen Sterling, Vogt, Brazie, Billings and Warren) the result was that from January 20 to December 31, with the exception of Sundays and holidays, not more than five days passed without from twenty to seventy men being employed at out-door work, with good results to the city. In this connection, as stated by me in a former report, it should not be supposed that all inmates are able-bodied, or that all who are will do a full day's work; many are unable to work from disability, and others spend their short sentences in recovering from the effects of debauchery, injuries received in street broils, etc., and for many of the inmates the workhouse is practically a hospital. In general terms, prisoners have had no fixed occupation, but have been employed as circumstances dictated, on buildings and repairs, in the farm and garden, in street grading and general improvements, in routine work, and in making and repairing the clothing used on the premises.

THE WORK ACCOMPLISHED.

In order that as many as possible should be profitably employed—no steady employment within the grounds having been provided—it was deemed best to improve such highways within a reasonable distance as could be done without neglecting workhouse matters proper, and as soon as the frost disappeared the breaking of stone in the quarry was discontinued and the work of grading commenced.

Washington avenue was cut through and graded from Thirty-second to Thirty-sixth avenue north, making it a straight road to its intersection with Second street, thus relieving the latter and making Washington avenue much nearer, easier and favorite road to the city.

Twenty-sixth avenue north was graded from Second to Twelfth street, a distance of twelve blocks, thus opening up a good road in front of Prospect Park and approaches thereto. Second street was graded from Twenty-sixth to Twenty-eighth avenue north, as was Twenty-eighth avenue north from Second to Washington avenue.

The road in front of the workhouse grounds and adjacent thereto being in bad repair it was determined to grade and Macadamize the same from the workhouse line to a point below Shingle creek. The roadway and sidewalk have been graded and when compelled by the frost to desist, some fifteen hundred loads of broken stone had been placed in position. It is safe to say that when completed this highway will be second to none in the state, and one which the people will fully appreciate.

About twelve hundred loads of broken stone have been used in repairing bad spots on Second street, and it is proposed to continue the work as circumstances will permit until we have macadamized driveways on all highways leading to the business centers.

The grounds in front of the workhouse have been enlarged and systematically laid out, considerable sodding done and gravelled walks and driveways made—the beginning of a handsome park of three acres, the residence of the superintendent being moved to the northerly side fronting the park and repaired and painted. When the proposed fountain shall be placed in the center, a low fence in front and arched gateways over the circular driveways—when the ornamental trees have grown and the flower beds completed “Workhouse Park” will indeed be a beauty spot.

For details as to employment of inmates other than as stated herein, showing how all save the sick and crippled have been kept busy, reference is made to the tables accompanying this report.

PERMANENT IMPROVEMENTS.

The only work under this head other than the removal and repair of the superintendent's residence, was the building of a cottage for the deputy superintendent, the same being nearly ready for occupancy. The mechanics, such as carpenters, plasterers, bricklayers, etc., have been kept employed on necessary repairs to the institution.

FARM AND GARDEN.

The farm report accompanying this will show good results, the only exception being late cabbage, the crop of which was quite poor owing to the dry season, we have not and do not expect to purchase any vegetables whatever—an important item.

DRAINAGE AND WATER SUPPLY.

The matter of draining is a very important one, as a matter of fact other than direct seeping into the ground there is no drainage at the workhouse, attention has been called to this matter in all previous reports yet nothing has been done. All night soil is of necessity put directly on the land or in shallow cesspools and pumped out on the land from time to time. This should not and need not be. There is a fall of nine feet in the grade from the workhouse to the bridge crossing Shingle creek, fully sufficient for a sewer: if the council will authorize the same most of the work can be done by the inmates and the actual outlay will be small.

The water supply is ample and the quality so far is good; how long it will remain so without proper drainage is an open question. In order to avail ourselves of the supply for better fire protection small hose is needed within the buildings and a reel of large hose on the outside. At present we have to rely wholly on tank pressure, the tanks in the upper parts of buildings being kept full, pipe connection being made therewith. If the hose is furnished arrangements can easily be made for direct pressure from the engine room.

HEALTH OF INMATES.

Very few cases of sickness have arisen at the workhouse although many were sick when they arrived, nearly all speedily yielded to treatment and the general health may be reported good. Our medical expenses have been \$104.94 for the year, or at the rate of two cents per capita per week. We have no regular physician but the city physician or his assistant make visits when called upon.

The first death since the opening of the institution occurred July 6, when Geo. Gundberg, who was received two days previous, died of heart trouble, superinduced by chronic alcoholism.

LIVING EXPENSES.

The diet of inmates is plain and wholesome, and is not limited as to quantity. That it agrees with them is evidenced by the table of weights attached hereto, inmates gaining an average of three pounds each. While they get plenty to eat they have plenty of work; we cannot look for one without the other. The cost of living, including all employes, was 9.51 cents per capita per day, or about three cents per day less than last year, a reduction due to care exercised in the purchase of supplies and the management of the kitchen. Among the accompanying tables is one showing cost of maintenance for the four years during which the institution has been in operation.

THE WOMAN QUESTION.

Of late considerable has been said as to the advisability of erecting a reformatory for women, largely, I think, by those who have not carefully considered the matter. Without desiring to dampen the ardor of any who strive to do good, I suggest that the consequent cost be considered. It is very doubtful whether more than half a dozen of the many women sent to the workhouse during the year were fit subjects for a reformatory. Where they have been found such the proper measures were taken to transfer them to Bethany Home, the House of the Good Shepherd or to their friends. It seems to be forgotten that we have a matron and that the female inmates are kept apart from the others.

In this connection it should be borne in mind that the increasing number of inmates will necessitate more cell room at an early day, and I recommend the addition of another story to the laundry building. The second story to be fitted up with quarters for the women inmates and a room for the matron. The expense would not be large and all the cell rooms in the old block would thus be made available for males.

STATISTICAL.

Accompanying this report, as already stated, detailed exhibits will be found which will show matters of more or less interest to those interested in statistics.

The farm proper originally cost the city less than \$18,000, and is now worth \$75,000. The buildings and improvements cost \$101,079.70, while the personal property is inventoried at \$9,493.

The expenses of the year were nominally \$47,796.20, but the cash outlay was only \$21,815.12, the difference being the value of prison labor.

During the year 1873 males and 124 females, a total of 1,997 prisoners, were received; all but four on commitments from the municipal court, the exceptions being from the district court.

Of the total the daily average was 113.73. Nearly two-thirds, or an even 1,200, were committed for drunkenness, 324 for vagrancy and 214 for disorderly conduct. Nearly all of the others, except 124 for petit larceny, were violators of minor city ordinances.

The native and foreign born were nearly even, or 950 natives and 1,047 foreigners. Sweden takes the lead with 256; Ireland comes next with 201; then comes New York with 194, Norway 188, Minnesota 141 and Canada 122; no other state or kingdom reaching the one hundred mark. The colored people numbered 38 and Indians 2.

The former religious training, according to their own statements, was: Protestants, 909; Roman Catholics, 844; and Hebrews, 3; while 341 disclaimed ever having had any.

Only 99 claimed to be temperate, 586 moderate drinkers, and the balance (1,312) intemperate.

Those who could read and write numbered 1,884; read but not write, 35; neither read or write, only 78.

Over one-third, or 718 persons, claimed to have no living relatives.

Two-fifths of the 1,997 commitments were re-committed; 338 were re-committed once, 185 twice, 114 three times, and 333 from five to nineteen times, only one reaching the latter number.

It will be seen from the last above paragraph that there are those who persist in making a home, at short intervals, of the institution. Perhaps legislation which would make the term at least six months after a third commitment might be salutary.

MISCELLANEOUS.

Religious services have been held nearly every Sunday without expense to the city. As the officiating clergymen donate their time it seems only proper that the necessary expense be paid, and I recommend that two hundred dollars be set aside for that purpose during the year.

Our little library needs replenishing. The city has paid only fifty dollars for the purchase of books during three years and should pay at least as much this year. The value of a library, even though a small one, in such an institution need not be dwelt upon.

The discipline among both employes and prisoners has been very good, cases of infraction of the rules being quite scarce.

Having kept the actual outlay some three thousand dollars inside of the estimate a year ago, I suggest that the same be used for a basement for the new cell block on the south. It would be well if basements were put in under all the cell blocks.

The item of lighting is of moment, especially when the dangers from explosions from oil lamps is considered. An extra dynamo at the pumping station would give all the light needed without any considerable increase in expense.

In closing this report I acknowledge the many obligations I am under to Deputy Superintendent Whelan, and all other officers and employes; one and all have at all times been zealous in the discharge of their several duties and are largely entitled to whatever credit the institution has earned. Nor do I forget the cheerful co-operation at all times received from your honorable body and especially from your committee having general supervision of the Work House.

Respectfully submitted,

JOHN WEST,
Superintendent.

Ledger Balances of the Minneapolis Workhouse for the Fiscal Year Ending December 31, 1889

	Dr.	Cr.
Printing and stationery.....	\$68.95	
Tools.....	96.74	
Salaries.....	9,360.71	
Fuel and light.....	2,151.21	
Expenses.....	907.42	
Building and repairs.....	4,537.66	
Clothing and bedding.....	3,183.32	
Living.....	4,126.52	
Medical expenses.....	104.94	
Farm and garden.....	637.15	
Stock harness and implements.....	253.35	
Feed.....	661.06	
Routine work.....	8,077.50	
House furnishing.....	374.59	
Road work.....	8,181.25	
Cutting ice.....	101.25	
Improving grounds.....	2,190.00	
Team work.....	2,569.50	
Work house collections.....	193.08	
Bills audited.....		\$21,815.12
City treasurer.....		193.08
Teaming.....		2,569.50
Convict labor.....		23,218.50
Total.....	\$47,796.20	\$47,796.20

Bills Audited Each Month.

	Dr.	Cr.
January.....	\$1,719.86	
February.....	2,211.66	
March.....	1,909.80	
April.....	2,185.98	
May.....	1,513.51	
June.....	1,377.93	
July.....	2,143.31	
August.....	1,371.87	
September.....	1,345.24	
October.....	2,351.87	
November.....	1,910.06	
December.....	1,774.03	
Total.....	\$21,815.12	
Workhouse collections.....		193.08
Convict labor.....		23,218.50
Teaming.....		2,569.50
Total.....	\$47,796.20	

Average Number of Prisoners in Workhouse for the Fiscal Year Ending December 31, 1889.

	Number of days.	Whole number.	Daily average.
January.....	31	3,651	117.77
February.....	28	3,471	123.97
March.....	31	3,884	125.29
April.....	30	3,577	119.23
May.....	31	3,471	111.96
June.....	30	2,832	94.50
July.....	31	3,148	101.55
August.....	31	2,523	81.39
September.....	30	2,784	92.80
October.....	31	4,043	130.42
November.....	30	4,230	141.00
December.....	31	3,872	124.90
Total number of days.....	365		
Total days.....		41,486	
Daily average for the year.....			113.73

Results of Farming

	Dr.	Cr.
1,500 bushels potatoes @ 25c.....	\$375.00	
65 " tomatoes @ 35c.....	22.75	
54 " beets @ 30c.....	16.20	
45 " carrots @ 30c.....	13.50	
50 " onions @ 35c.....	17.50	
125 " beans @ 1.75.....	218.75	
210 dozen green corn @ 10c.....	21.00	
25 bushels string beans @ 40c.....	10.00	
25 " green peas @ 65c.....	16.25	
300 " field corn @ 35c.....	105.00	
15 tons hay @ 10.00.....	150.00	
150 bushels rutabagas @ 25c.....	37.50	
40 bushels parsnips @ 30c.....	12.00	
200 squash @ 5c.....	10.00	
100 pumpkins @ 3c.....	3.00	
1,000 heads celery @ 3c.....	30.00	
Small vegetables.....	50.00	
1,500 heads cabbage @ 4c.....	60.00	
100 heads cauliflower @ 6c.....	6.00	
20 bushels cucumbers @ 40c.....	8.00	
2,700 pounds pork @ 5c.....	135.00	
800 pounds beef @ 5c.....	40.00	
Pigs sold.....	101.00	
25 shoats on hand @ 5.00.....	125.00	
27 large hogs on hand @ 17.00.....	459.00	
Convict labor.....		\$590.00
Seed.....		67.15
Balance in favor of farming.....		1,385.30
Total.....	\$2,042.45	\$2,042.45

Maintenance of Workhouse for the Fiscal Year Ending December 31, 1889.

	Dr.	Cr.
Salaries.....	\$9,360.71	
Clothing and bedding.....	3,183.32	
Living.....	4,126.52	
Feed.....	661.06	
Feed and light.....	2,151.21	
Medical expenses.....	104.94	
Expense.....	907.42	
Surplus of credits over expenditures.....	8,621.20	
Profits of farming.....		\$1,385.30
Estimated amount of fuel on hand.....		350.00
Estimated amount of groceries on hand.....		150.00
Estimated amount of clothing and bedding on hand.....		1,250.00
Teaming.....		2,560.50
Convict labor.....		23,218.50
Workhouse collections.....		193.08
Total.....	\$29,116.38	\$29,116.38

Maintenance Excluding Clothing, Salaries, etc.

	Dr.	Cr.
Cost of groceries and provisions.....	\$4,126.52	
Farm produce used.....	650.00	
Less groceries and provisions on hand..		\$150.00
Less cash for board of free labor and county prisoners.....		158 53
Total.....	\$4,776.52	\$308.53
Total cost of groceries and provisions	\$4,467.99	
Whole number of inmates including officers and employes for the year.....	46,961.00	
Cost per capita per diem.....	.09.51	
Cost per capita per week.....	.66.57	
Cost per capita per year.....	34.61	

Workhouse Collections for the Fiscal Year Ending December 31, 1889.

	Dr.	Cr.
Wood sold.....	\$3.50	
Hides sold.....	7.33	
Old iron and rags sold	7.00	
Pigs sold.....	101.00	
Corn fodder sold.....	21.50	
Vegetables sold.....	47.40	
Board of free labor.....	25.75	
Board of county prisoners.....	132.68	
Bills receivable.....		\$153.08
City treasurer.....		193.08
Total.....	\$346.16	\$346.16

Inventory of Personal Property.

Office.....	\$475.00
Guard room.....	255.00
Library.....	25 00
Barber shop.....	28.00
Officer's sleeping rooms.....	275.00
Cell block, east wing.....	225.00
Cell block, north wing.....	1,200.00
Cell block, Female.....	220.00
Prisoner's dining hall.....	207.00
Officer's mess hall.....	65.00
Kitchen.....	378.00
Laundry.....	150.00
Shoe and tailor shop.....	15.00
Boiler room tools.....	185.00
Barn including stock and feed.....	2,050.00
Tool and wagon house.....	723.00
Cellar.....	225.00
Bake shop.....	50.00
Storeroom, clothing.....	1,250.00
Storeroom, provisions.....	150.00
Hospital and dispensary.....	185.00
Piggery.....	584.00
Ice house.....	18.00
Root house.....	470.00
Carpenter shop.....	85.00
Total.....	\$9,493.00

Summary.

Real estate, sixty acres.....	\$75,000.00
Cost of buildings.....	101,079.70
Improvement on buildings, convict labor and material.....	4,537.66
Personal property per inventory.....	9,493.00
Total.....	\$190,110.36

Statement of Prisoners Remaining in Prison December 31, 1889.

Males.....	99
Females.....	20
Total.....	119

Number of Prisoners Received During the Year.

Males.....	1,873
Females.....	124
Total.....	1,997

Number Discharged During the Year.

By expiration of sentence.....	1,640
By payment of fine.....	138
By sentence suspended.....	181
By transferred to hospital.....	9
By transferred to House of Good Shepard.....	3
By death.....	1
By escape.....	9
By habeas corpus.....	7
Total.....	1,988
Males.....	1,854
Females.....	134
Total.....	1,988

Number Remaining in Prison December 31, 1889.

Males....	118
Females.....	10
Total.....	128

Number Received Each Month.

	Males.	Females.	Total.
January.....	158	6	164
February.....	147	4	151
March.....	128	14	142
April.....	170	7	177
May.....	153	14	167
June.....	132	8	140
July.....	152	10	162
August.....	123	7	130
September.....	168	11	179
October.....	201	21	222
November.....	196	19	215
December.....	145	3	148
Total.....	1,873	124	1,977

Number Discharged Each Month.

	Males.	Females.	Total.
January.....	145	18	163
February.....	133	7	140
March.....	163	7	170
April.....	139	9	148
May.....	182	11	193
June.....	134	9	143
July.....	161	13	174
August.....	130	10	140
September.....	148	10	158
October.....	172	9	181
November.....	186	24	210
December.....	161	7	168
Total.....	1,854	134	1,188

Number Remaining at End of Each Month.

	Males.	Females.	Total.
January.....	112	8	120
February.....	126	5	131
March.....	91	12	103
April.....	122	10	132
May.....	93	13	106
June.....	91	12	103
July.....	82	9	91
August.....	75	6	81
September.....	95	7	102
October.....	124	19	143
November.....	134	14	148
December.....	118	10	128

By whom those Received During the Year were Committed.

	Males.	Females.	Total.
District court, Hennepin county.....	4	4	8
Minneapolis Municipal court.....	1,869	124	1,993
Total.....	1,873	124	1,997

Terms of Sentence of Prisoners Received During the Year.

	Males.	Females.	Total.
Five days.....	15	.....	15
Ten days.....	543	11	554
Fifteen days.....	513	11	524
Twenty days.....	189	15	204
Twenty-five days.....	3	.....	3
Thirty days.....	360	47	407
Forty days.....	2	1	3
Forty-five days.....	3	.....	3
Sixty days.....	129	19	148
Ninety days.....	104	19	123
Ninety and ninety days.....	10	1	11
Six months.....	2	.....	2
Total.....	1,873	124	1,997

Age, when Committed.

Under twenty years.....	120
Between twenty and twenty-five years.....	348
Between twenty-five and thirty years.....	493
From thirty to thirty-five years.....	335
From thirty-five to forty years.....	288
From forty to fifty years.....	258
From fifty to sixty years.....	122
Sixty years and over.....	33
Total.....	1,997

Religious Training.

Roman Catholics.....	744
Protestants.....	909
Hebrew.....	3
Without religious training.....	341
Total.....	1,997

Habits of Life.

Claim to be temperate.....	99
Moderate use of liquor.....	586
Admit themselves to be intemperate.....	1,312
Total.....	1,997

Color.

White.....	1,957
Black.....	38
Indian.....	2
Total.....	1,997

Education.

Could read and write.....	1,884
Could read only.....	35
Could neither read or write.....	78
Total.....	1,997

Previous Commitments.

Received for the first time.....	1,127
Recommitted once.....	338
" twice.....	185
" three times.....	114
" four times.....	65
" five times.....	61
" six times.....	50
" seven times.....	20
" eight times.....	17
" nine times.....	9
" ten times.....	2
" eleven times.....	1
" twelve times.....	1
" thirteen times.....	1
" fourteen times.....	1
" fifteen times.....	1
" sixteen times.....	1
" seventeen times.....	1
" eighteen times.....	1
" nineteen times.....	1
Total.....	1,997

Social Relations.

Marriage and having children.....	279
Married and having no children.....	95
Widows and widowers having children.....	77
Widows and widowers having no children.....	36
Unmarried and having both parents living.....	431
Unmarried and having one parent living.....	361
No relations.....	718
Total.....	1,997

Health on Admission.

Good health.....	1,529
Poor health.....	467
Cripples.....	10
Total.....	1,997

Nativity.

Austria.....	4	Mississippi.....	22
Bohemia.....	2	Missouri.....	1
Belgium.....	1	Mexico.....	194
Canada.....	122	New York.....	10
Connecticut.....	8	New Jersey.....	5
California.....	7	New Hampshire.....	3
Denmark.....	12	Newfoundland.....	2
District of Columbia.....	10	Nova Scotia.....	7
England.....	94	New Brunswick.....	188
Finland.....	14	Norway.....	1
France.....	6	North Carolina.....	57
Florida.....	3	Ohio.....	2
Germany.....	72	Poland.....	43
Georgia.....	1	Pennsylvania.....	1
Holland.....	6	Russia.....	3
Hungary.....	2	Rhode Island.....	2
Indiana.....	19	Spain.....	256
Illinois.....	85	Sweden.....	4
Iowa.....	58	Switzerland.....	29
Ireland.....	201	Scotland.....	5
Italy.....	8	Tennessee.....	16
Isle of Man.....	1	Vermont.....	6
Kentucky.....	13	Virginia.....	85
Kansas.....	7	Wisconsin.....	4
Louisiana.....	1	Wales.....	2
Luxemburg.....	1	West India.....	2
Maine.....	56	Total.....	1,997
Massachusetts.....	59	Native born.....	950
Michigan.....	31	Foreign born.....	1,047
Maryland.....	4	Total.....	1,997
Minnesota.....	141		

Previous Occupation.

Actors.....	3	Carriage painter.....	2
Agents.....	14	Conductors.....	3
Artists.....	1	Chemists.....	1
Bakers.....	17	Domestics.....	38
Barbers.....	29	Dressmakers.....	1
Bartenders.....	8	Druggists.....	6
Brick burners.....	1	Dog catchers.....	1
Butlers.....	1	Engineers.....	23
Bridge builders.....	1	Expressmen.....	3
Brakemen.....	33	Firemen.....	11
Builders.....	1	Farmers.....	49
Boilermakers.....	7	Flour packers.....	4
Bricklayers.....	19	Fitters.....	1
Brewers.....	1	Gasfitters.....	1
Brass finishers.....	2	Gardeners.....	3
Bookbinders.....	2	Glass blowers.....	2
Bookkeepers.....	7	Grooms.....	34
Blacksmiths.....	26	Glaziers.....	1
Butchers.....	23	Gunsmiths.....	2
Boxmakers.....	1	Harnessmakers.....	2
Carpenters.....	62	Hotel runners.....	1
Cabinetmakers.....	5	Housekeepers.....	32
Carpet layer.....	5	Housemovers.....	1
Candy maker.....	1	Horseshoers.....	1
Carriage smith.....	2	Hotelkeepers.....	1
Cardrivers.....	1	Hackmen.....	1
Carriage washers.....	1	Herders.....	1
Cooks.....	50	Heaters.....	1
Clerks.....	24	Helpers.....	4
Cigarmakers.....	14	Ironworkers.....	4
Coopers.....	15	Janitors.....	4

Journalists	7	Stonecutters	7
Jewelers	1	Switchmen	22
Laborers	846	Saloonkeepers	1
Laundresses	24	Shoemakers	38
Lath sawyers	1	Scavengers	1
Lathers	5	Sailors	4
Looking-glass workers	1	Students	4
Lumber sorters	1	Salesmen	10
Linen twisters	1	Steamfitters	8
Linemen	1	Seamstresses	12
Lumbermen	20	Silverplaters	1
Machinists	15	Shinglepackers	1
Millers	10	Storekeepers	3
Miners	7	Sailmakers	1
Meatpackers	1	Scalers	1
Millwrights	1	Sawyers	1
Musicians	2	Silk weavers	1
Molders	13	Teamsters	59
Newsboys	1	Tobacconists	8
Nurses	4	Tailors	24
No occupation	10	Tanners	1
Oilers	1	Tinners	11
Plumbers	13	Telegraph operators	4
Peddlers	4	Teachers	2
Papermakers	2	Turners	1
Printers	14	Veterinary surgeons	1
Pilots	1	Waiters	40
Plasterers	9	Wood turners	1
Painters	45	Waitress	1
Pressmen	1	Well diggers	1
Porters	7	Woodworkers	4
Prostitutes	4	Wagonmakers	1
Puddlers	2	Weavers	1
Roofers	1	Watchmakers	4
Reporters	1	Wool spinners	1
Shoecutters	1		
Stonemasons	12	Total	1,997
Ship carpenters	2		

Crime or Offense.

Assault	3	Indecent exposure	7
Assault and battery	17	Keeping house of ill-fame	11
Cruelty to child	1	Lewd and indecent conduct	7
Cruelty to animals	1	Obtaining money under false pre- tense	1
Common prostitute	3	Petit larceny	124
Contempt of court	2	Peddling without a license	2
Default of bonds to keep the peace	3	Using obscene language	2
Drunkenness	1,200	Violating city ordinance	16
Disorderly conduct	214	Selling liquor without a license	2
Fornication	16	Vrgrancy	324
Fast driving	3	Wife beating	1
Found in house of ill fame	33		
Gambling	2	Total	1,997
Grand larceny, second degree	2		

Table Showing the Gain and Weight of Prisoners During their Term of Imprisonment.

TIME IMPRISONED.	Number weighed.	Increase.	Decrease.	Increase over decrease.	Largest single increase	Largest single decrease	Average increase	
							lbs.	oz.
Ten days	406	1,195	184	1,011	15	8	2	8
Fifteen days	381	1,278	171	1,107	17	12	2	14
Twenty days	167	697	76	621	20	7	3	12
Thirty days	348	1,495	260	1,235	23	10	3	8
Sixty days	76	246	74	172	16	9	2	6
Ninety days	38	154	78	76	28	16	2	....
Total	1,416	5,065	843	4,222	.....	.....	.....	.....

Table Showing the Current Monthly Expenses for the Year Ending December 31, 1889, and the Average Weekly Cost per Capita For Each Item.

Items.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	Average weekly cost per capita.
Tools.....	\$7.23	\$12.70	\$33.78	\$12.13	\$6.80	\$12.55	\$0.70	.....	\$2.05	\$8.80	.....	.....	\$96.74	\$0.02
Printing, stationery..	3.10	10.80	8.25	3.85	8.90	.....	4.55	\$2.25	11.80	2.90	.....	\$12.55	68.95	.01
Salaries.....	707.33	713.33	731.66	780.16	846.36	769.19	739.41	801.66	756.66	801.66	8856.66	856.66	9,360.71	1.58
Fuel and lights.....	417.62	658.52	203.78	511.54	.85	173.75	21.12	.....	.....	74.03	.....	.....	2,151.21	.36
Expense.....	47.81	79.80	103.51	90.79	113.53	10.75	90.24	82.76	35.61	78.69	110.23	54.61	907.42	.15
Clothing, bedding....	386.64	372.02	207.66	279.78	190.62	179.08	159.65	101.43	183.88	618.87	337.11	157.58	3,182.32	.54
Living.....	350.40	370.40	433.61	348.11	233.72	249.15	495.29	229.05	333.05	473.61	239.15	370.81	4,126.52	.70
Medical expense....	15.35	25.77	4.26	8.79	13.81	.....	15.71	.....	.....	21.25	.....	.....	104.94	.02
Farm and garden....	.....	.....	.....	78.50	83.00	98.91	123.24	83.75	117.00	72.75	.....	.....	657.15	.11
Feed.....	14.25	63.67	23.90	64.16	71.00	57.13	81.75	70.93	32.20	64.43	63.50	54.14	661.07	.11
House furnishing....	6.18	12.88	9.71	92.65	17.58	5.50	4.90	67.60	7.00	41.33	74.56	34.40	374.59	.06
Total.....	\$1,935.99	\$2,320.07	\$1,850.13	\$2,270.46	\$1,595.17	\$1,555.98	\$1,745.56	\$1,439.43	\$1,479.25	\$2,258.32	\$1,681.51	\$1,540.75	\$21,662.62	\$3.66

Table Showing Prison Labor, When and Where Performed, Number of Days and Amount per Day, for the Year Ending December 31st, 1889.

MONTHS.	Routine work.		Farm and garden.		Building and repairs.		Public road.		Making and repairing clothg.		Improving grounds.		Teaming.		Cutting ice.		Totals.	
	Days.	Amt.	Days.	Amt.	Days.	Amt.	Days.	Amt.	Days.	Amt.	Days.	Amt.	Days.	Amt.	Days.	Amt.	Days.	Amt.
January....	930	\$637.50			162	\$121.50	42	31.50	324	\$243.00			54	\$175.50	135	\$101.25	1,647	\$1,370.25
February..	1,246	934.50			210	157.50	518	388.50	218	163.50			48	156.00			2,240	1,800.00
March.....	1,181	885.75			221	165.75	685	521.25	146	109.50			76	241.00			2,319	1,923.25
April.....	810	607.50	78	\$58.50	286	214.15	1,150 ² / ₃	863.00	234	175.50	500	\$375.00	74	235.00			3,132 ² / ₃	2,520.00
May.....	1,030	772.50	108	81.00	378	283.50	1,008	756.00	162	121.50	540	405.00	70	224.00			3,206	2,643.50
June.....	770	577.50	120	90.00	275	206.25	850	637.50	178	133.50	320	240.00	60	219.50			2,582	2,104.25
July.....	713	534.75	123	92.25	225	168.75	920	690.00	135	101.25	223	167.25	77	244.50			2,416	1,998.75
August.....	644	483.00	111 ² / ₃	83.75	165	123.75	823	617.25	110	82.50	243	182.25	60	220.50			2,165 ² / ₃	1,793.00
September.	666	490.50	149	111.75	175	131.25	705 ² / ₃	529.25	170	127.50	348	261.00	76	241.00			2,280 ² / ₃	1,901.25
October.....	806	604.50	97	72.75	260	195.00	1,406	1,054.50	197	147.75	390	292.50	81	256.50			3,237	2,623.50
November..	920	690.00			457	342.75	1,386	1,039.50	237	177.75	356	267.00	55	177.50			3,411	2,694.50
December..	1,054	790.50			324	243.00	1,404	1,053.00	189	141.75			55	178.50			3,626	2,406.75
Total..	10,770	\$8,077.50	780 ² / ₃	\$500.00	3,138	\$2,353.50	10,908 ¹ / ₃	\$8,181.25	2,300	\$1,725.00	2,920	\$2,190.00	804	\$2,569.50	135	\$101.25	31,762	\$25,788.00

Comparative Statement Showing Maintenance of Workhouse for the Years 1886, 1887, 1888 and 1889.

ITEMS.	1886.		1887.		1888.		1889.	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Salaries	\$3,669.33		\$8,803.29		\$7,869.94		\$9,360.71	
Clothing.....	2,189.09		2,448.50		1,393.77		3,183.32	
Living.....	1,449.56		4,373.72		3,154.66		4,126.52	
Feed.....	213.32		401.35		675.67		661.06	
Fuel and light....	1,900.65		2,958.04		868.05		2,151.21	
Medical expenses.	91.37		168.17		112.95		104.94	
Expense.....			689.98		722.13		907.42	
Surplus of credits over expend'ts	393.01		1,234.88		1,143.24		8,629.20	
Profits of farming		\$214.10		\$508.88		\$1,219.21		\$1,385.30
Estimated am't of fuel on hand.....		760.00		975.00		318.25		350.00
Estimated am't of cloth'g on hand.....		2,100.00		1,950.50		600.00		1,250.00
Estimated am't of groc's on hand.....		194.00		120.00		165.50		150.00
Teaming.....		724.00		1,944.00		1,641.50		2,569.50
Convict labor.....		5,898.75		14,727.20		11,747.00		23,218.50
W'k'ho'se collect'ns		15.48		852.35		248.95		193.08
Total.....	\$9,906.33	\$9,906.33	\$21,077.93	\$21,077.93	\$15,940.41	\$15,940.41	\$29,116.38	\$29,116.38

Comparative Statement of Maintenance Excluding Salaries, Clothing, etc., for the Years 1886, 1887, 1888 and 1889.

ITEMS.	1886		1887		1888		1889	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cost of groceries and prvs'n	\$1,449.56		\$4,373.72		\$3,154.66		\$4,126.52	
Farm produce used.....	151.00		400.00		500.00		650.00	
Less groceries and provisions on hand.....				\$120.00		\$266.50		\$150.00
Less cash for board of free labor and county pris'ners				677.98		24.43		158.53
Total.....	1,600.56		4,773.72	797.98	3,654.66	290.93	4,776.52	308.53
Total cost of groceries and provisions.....	1,600.56		3,975.74		3,363.73	4,467.90		
Whole number of inmates including officers and employes for the year.....	12,810.00		33,880.00		27,375.00	46,961.00		
Cost per capita per diem....	12.49		11.73		12.29	99.51		
Cost per capita per week....	87.43		82.11		86.03	66.57		
Cost per capita for the year	45.46.36		42.69.72		37.60.74	34.61.00		

Comparative Statement of the Average Number of Prisoners in Workhouse for the Years 1886, 1887, 1888 and 1889, as follows:

MONTH.	1886.			1887.			1888.			1889.		
	No. of days.	Whole number.	Daily average.	No. of days.	Whole number.	Daily average.	No. of days.	Whole number.	Daily average.	No. of days.	Whole number.	Daily average.
January				31	1,966	63.42	31	3,551	114.55	31	3,651	117.77
February.....				28	1,631	58.22	29	3,756	129.52	28	3,471	123.97
March.....				31	2,144	69.16	31	3,682	118.77	31	3,884	125.29
April.....				30	1,382	46.00	30	2,316	77.02	30	3,577	119.23
May.....				31	1,486	47.94	31	2,180	70.32	31	3,471	111.96
June.....				30	1,934	64.47	30	1,950	65.00	30	2,832	94.50
July.....				31	1,893	61.00	31	2,439	78.58	31	3,148	101.55
August.....	30	771	25.70	31	1,725	55.65	31	2,168	69.97	31	2,523	81.39
September.....	30	1,463	48.77	30	2,080	69.33	30	1,618	53.77	30	2,784	92.80
October.....	31	1,522	49.00	31	2,561	82.61	31	1,866	60.19	31	4,043	130.42
November.....	30	1,597	53.23	30	2,699	89.97	30	2,083	69.43	30	4,230	141.00
December.....	31	2,085	67.25	31	2,700	87.00	31	2,718	89.94	31	3,872	124.90
Total.....	152	7,438	49.00	365	24,201	66.00	366	30,327	83.00	365	41,486	113.73

Comparative Statement of Number of Inmates Received for Four Years, 1886-7-8-9.

MONTH.	1886.			1887.			1888.			1889.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
January.....				78	4	82	175	3	178	158	6	164
February.....				62	12	74	145	2	147	147	4	151
March.....				106	7	113	106	10	116	128	14	142
April.....				61	4	65	102	3	105	170	7	177
May.....				106	6	112	121	5	126	153	14	167
June.....				125	4	129	112	9	121	132	8	140
July.....				129	13	142	155	3	158	152	10	162
August.....	71		71	160	9	169	132	10	142	123	7	130
September.....	104	3	107	127	5	132	106	10	116	168	11	179
October.....	83	2	85	132	17	149	128	8	136	201	21	222
November.....	114	3	117	146	3	149	149	6	155	196	19	215
December.....	103	9	112	139	3	142	148	23	171	145	3	148
Total.....	475	17	492	1,371	77	1,448	1,579	92	1,671	1,873	124	1,997

Comparative Statement of Inmates Discharged for the Four Years, 1886, 1887, 1888 and 1889.

MONTHS.	1886.			1887.			1888.			1889.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
January.....				79		79	121	5	126	145	18	163
February.....				68	6	74	165	2	167	133	7	140
March.....				101	4	105	116	4	120	163	7	170
April.....				93	6	99	147	8	155	139	9	148
May.....				82	3	85	107	4	111	182	11	193
June.....				113	7	120	127	7	134	134	9	143
July.....				135	2	143	145	4	149	161	13	174
August.....	31		31	155	7	162	161	8	169	130	10	140
September.....	85	3	88	133	6	139	101	9	110	149	10	158
October.....	106		106	122	4	126	124	12	136	172	9	181
November.....	84	1	85	138	16	154	119	6	125	186	24	210
December.....	108	9	117	133	4	137	133	8	141	161	7	168
Totals.....	414	13	427	1,352	71	1,423	1,566	77	1,643	1,854	134	1,988

Comparative Statement of Inmates Remaining in Prison for the Years 1886, 1887, 1888 and 1889, at the End of Each Month.

MONTH.	1886			1887			1888			1889		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
January.....				61	7	68	138	3	141	112	8	120
February.....				55	3	58	118	3	121	126	5	131
March.....				90	6	96	108	9	117	91	12	103
April.....				28	4	32	63	4	67	122	10	132
May.....				52	7	59	77	7	82	93	13	106
June.....				64	4	68	62	7	69	91	12	103
July.....				58	9	67	72	6	78	82	9	91
August.....	40		40	11	74	85	4	8	51	75	6	81
September.....	59		59	57	10	67	48	9	57	95	7	102
October.....	37	1	38	70	19	89	52	5	57	124	19	143
November.....	67	3	70	74	10	84	82	5	87	134	14	148
December.....	62	3	65	80	9	89	99	20	119	118	10	128

ANNUAL REPORT

OF THE

SUPERINTENDENT OF POOR,

Of the City of Minneapolis.

POOR DEPARTMENT.

SUPERVISORS.

HON. E. C. BABB,	- - - - -	President.
ALDERMAN JOHN F. MCGOWAN,	- - - - -	1st Ward.
" VERNON M. SMITH,	- - - - -	2d Ward.
" GEO. A. DERNAM,	- - - - -	3d Ward.
" S. B. LOYE,	- - - - -	4th Ward.
" HENRY W. BRAZIE.	- - - - -	5th Ward.
" JOHN A. SWANSON,	- - - - -	6th Ward.
" JOHN H. PARRY,	- - - - -	7th Ward.
" F. E. HANSON,	- - - - -	8th Ward.
" JAMES H. BRADISH,	- - - - -	9th Ward.
" VINCENT REEVES,	- - - - -	10th Ward.
" J. W. PHILLIPS,	- - - - -	11th Ward.
" ABRAM S. ADAMS,	- - - - -	11th Ward.
" JAMES S. GRAY,	- - - - -	13th Ward.
C. L. SNYDER,	- - - - -	Superintendent of Poor.
LARS OWRE,	- - - - -	Clerk to Superintendent.

ANNUAL REPORT

OF THE

SUPERINTENDENT OF POOR,

MINNEAPOLIS, MINN.

To the Honorable the City Council of the City of Minneapolis:

GENTLEMEN—In compliance with law, I herewith respectfully submit for your consideration the ninth annual report of the department of poor, giving in detail the work and expenditures during the year ending December 31, 1889:

NATIONALITY RECORD OF APPLICANTS DURING YEAR 1889.

Number of applications made at office.....			6,019
African.....	214	Italian.....	7
American.....	1,022	Jewish.....	75
Bohemian.....	113	Norwegian.....	848
Canadian.....	81	Polish.....	77
Danish.....	179	Portuguese.....	0
Dutch.....	21	Scotch.....	71
English.....	180	Spanish.....	0
Finnish.....	67	Swedish.....	1,181
French.....	227	Swiss.....	27
German.....	672	Welsh.....	31
Hungarian.....	10	Russian.....	4
Indian.....	3		
Irish.....	909	Total.....	6,019
Number of visits made by superintendent.....			1,242
Number of cases where relief has been granted in groceries.....			2,659
Number of orders given for groceries, 2,746—amounting to.....			\$7,271.40
Number of orders given for wood, 1,630—amounting to.....			2,879.33

NUMBER OF PATIENTS IN HOSPITALS JANUARY 1, 1889.

City hospital.....	50	Bethany Home—	
Homeopathic.....	2	Adults.....	11
Northwestern.....	5	Infants.....	17
St. Mary's.....	1		—
Deaconess.....	1	Total.....	87

NUMBER SENT TO HOSPITALS DURING YEAR.

City hospital.....	499	St. Barnabas.....	2
Homeopathic.....	20	Bethany Home—Adults.....	35
Northwestern.....	9	Infants.....	20
Deaconess.....	8		—
St. Mary's.....	7	Total.....	600

NUMBER NOW IN HOSPITALS UNDER CHARGE OF CITY.

City hospital.....	48	St. Barnabas.....	1
Homeopathic.....	4	Bethany's Home—Adults.....	4
Northwestern.....	3	Infants.....	10
Deaconess.....	2		—
St. Mary's.....	2	Total.....	74

Hospital Expenses.

Homœopathic.....	\$816.73	
Northwestern.....	1,015.26	
Deaconess.....	268.93	
St. Mary's.....	178.15	
St. Barnabas.....	72.22	
Bethany Home.....	3,434.65	
For conveyance.....	532.00	
		\$6,317.94
Number of inmates of poor house January 1, 1889.....	78	
Number sent to poor house during year.....	48	
Number now in poor house under charge of city.....	33	
Poor house expenses.....		\$6,028.03
Number of visits made by Drs. Chase and Hall, assistant city physicians at hospitals.....	733	
At other places.....	1,396	
Number of burials furnished.....	231	
		\$1,749.50
Number of persons furnished transportation to other places.....	252	
		\$1,875.05
Bills allowed by board of supervisors of poor.....		\$1,140.60
Expended.....		\$27,261.85
Refunded.....		401.99
Total expenses as above enumerated.....		\$26,859.86

A List of Bills Allowed by Supervisors of Poor, from January 1, 1889, to December 31, 1889.

H. H. Molloy.....	\$5.00	T. K. Gray.....	2.50
J. W. Field.....	3.00	Crocker & Thompson.....	4.00
T. K. Gray.....	4.15	Crocker & Thompson.....	4.00
M. R. Curtiss.....	13.25	Crocker & Thompson.....	4.25
F. V. Cook.....	8.00	C. A. Heffelfinger.....	10.00
Mrs. Cryster.....	4.00	St. Louis Drug Store.....	4.00
H. H. Molloy.....	5.00	Crown Drug Store.....	4.50
Goodyear Rubber Co.....	.68	Matilda Ryberg.....	10.00
Minneapolis Stamp Co.....	2.00	Mrs. McCahn.....	14.29
H. H. Molloy.....	12.20	Mrs. Archibald.....	20.00
B. R. Thaxter.....	234.64	St. Mary's Hospital.....	20.00
James Cowning.....	7.50	Repair of ambulance.....	40.00
Peter Johnson.....	39.00	Medicine expenses of Dr. Hall.....	183.28
H. H. Molloy.....	11.50	Incidental expenses of superintendent of poor.....	258.04
C. Himmelsbach.....	8.50	Printing and stationery.....	80.57
Aug. Wetelstate.....	47.25		
John Olson.....	43.50		
H. A. Swanberg.....	32.00		
		Total.....	\$1,140.60

A List of Money Refunded to Superintendent of Poor from January 1, 1889, to December 31, 1889.

Jens Brobach.....	\$8.00	Lena Thomas.....	4.00
James Bann.....	25.31	Arthur Johnson.....	6.00
Anna Anderson.....	16.00	Mary Wilton.....	5.50
George Upton.....	3.50	R. Draper.....	5.33
Fred Johnson.....	1.66	Barney.....	5.00
Delage.....	27.00	John Morgan.....	22.14
Wm. Williams.....	5.50	Lobetsky.....	2.31
John O'Brien.....	8.26	Belle Morrow.....	5.00
Mike Coughlin.....	4.00	Rosa Prue.....	5.00
Mrs. Ayers.....	2.00	John Larson.....	38.76
Harry Bergott.....	14.15	Chas. Clausen.....	2.00
Clifford.....	4.50	Norman Nelson.....	.50
Emil Johnson.....	5.00	John Morgan.....	21.41
Inar Inarson.....	10.00	Mrs. Bagshaw.....	4.00
Albert Kramer.....	4.50	Carrie Nelson.....	1.00
Chas. Karner.....	9.13	Alice Taylor.....	6.00
Fritz Bulow.....	6.00	J. Edelstein.....	4.00
Wm. Kjelstad.....	2.00	John Morgan.....	22.14
Wm. Knight.....	2.81	Henry Miller.....	2.00
Anton Getz.....	2.00	John Morgan.....	21.43
Mrs. Schuster.....	15.00	Girl at Bethany Home.....	10.58
Cathrine Fox.....	10.00	Pauline Wold.....	6.50
Gunder Whitfield.....	3.55		
Mrs. Cummings.....	7.00		
Mayer Ranfield.....	4.50		
		Total.....	\$401.99

In closing the year's work, I deem it proper to state that 805 families have been aided during the year, which makes an average of 257 per month. The highest number was in February, which reached 472; lowest number was in September, which decreased to 155. Number of families with children sent to other places of support were 63. Number of families deserted by husbands leaving their families in destitute circumstances will average 10 per cent. of the total number aided. Ninety-one families, by diligent investigation and advice, have been placed in self-support. The indigent, aged and infirm we shall always have with us, and these we cheerfully give aid and comfort, either in hospitals or at their homes, as their several cases require. Upon the whole we have worked diligently to fulfill the arduous duties incumbent upon us, and have sent none away empty that, after investigation, were, in our opinion, worthy. Frequently good advice seemed to be of more worth than other aid. The estimate in money of the former superintendent, granted by the city council for the year 1889, was \$36,000. The actual amount expended was \$27,261.85. Include, if you please, the salaries of superintendent and clerk, \$2,400, which makes the total expenditure of the poor department \$29,661.85, leaving \$6,338.15 unexpended, which is covered back to the general fund of the city treasury.

In closing this annual report I desire to say to the honorable mayor and each and every member of the board of supervisors, I am under obligation for the hearty aid and sympathy extended to me, the uniform support given me in carrying out the city charity toward the deserving poor.

Respectfully submitted,

C. L. SNYDER,

Superintendent of Poor and Clerk to Board of Supervisors.

The report being read and adopted by the board of supervisors of the poor, it was unanimously resolved that the board hereby express confidence in the able and efficient manner in which Superintendent Snyder has discharged the arduous duties of his office.

ANNUAL REPORT

OF THE

CITY HOSPITAL,

Of the City of Minneapolis.

FOR THE FISCAL YEAR ENDING DEC. 31, 1889.

COMMITTEE OF THE CITY COUNCIL ON HEALTH AND HOSPITALS.

ALDERMAN H. W. BRAZIE, M. D.

" E. G. POTTER.

" J. C. STERLING.

_____, Superintendent.

C. A. CHASE, M. D., City Physician.

P. M. HOLL, M. D., Asst. City Physician.

MRS. L. H. BARD, Matron.

INTERNES.

C. H. JONES,

A. M. RIDGEWAY,

R. C. DUGAN.

NURSES.

PAULINE WOLD,

ELIZABETH G. DUNCAN,

MRS. L. V. BUXTON,

CLARA GILBERTSON,

G. W. DAHLQUIST.

ANNUAL REPORT
OF THE
CITY HOSPITAL,
MINNEAPOLIS, MINN.

To the Honorable the City Council of the City of Minneapolis:

GENTLEMEN — Herewith is respectfully submitted our first report (the second annual report) of the city hospital for the year ending December 31, 1889. For information regarding the operations of the city hospital we would respectfully call your attention to the accompanying tabulated statements, as shown by the records on file at the hospital.

The number admitted was.....	523
The number of births.....	2
The number remaining in hospital January 1, 1889.....	50
<hr/>	
Making the total under treatment for the year ending December 31, 1889.....	575
Of this number, 463 were discharged, 63 died, and 50 remained under treatment at the close of the year December 31, 1889.	
The largest number in hospital at any one time.....	57
The smallest number in hospital at any one time.....	34
Daily average number of patients per day.....	44
Average number of days per patient.....	28
The total number of days of hospital care.....	16,100
The death rate was about 10 per cent.	
The number of patients treated in the medical department.....	396
The number of patients treated in the surgical department.....	179
<hr/>	
Total.....	575
The whole number of patients treated during the year being 575, and the average number of days per patient being 28, makes a total of 16,100 days, or 2,300 weeks.	
The total expense of the city hospital for the year 1889, as shown by the accounts of the city comptroller was.....	\$12,337.32
Less cost of permanent improvements.....	388.21
<hr/>	
By using the comptroller's figures, the gross cost of patient per week was.....	\$11,949.11
The net cost of patient per week was.....	\$5.36
But the comptroller's accounts for the year 1889 include bills contracted in 1888, while the accounts kept at the hospital only include bills for the year 1889; deducting the difference between his accounts and ours.....	\$795.91
The total expense of the hospital was.....	11,541.41
Less cost of permanent improvements.....	388.21
<hr/>	
Net cost of hospital for year.....	\$11,153.20
The gross cost per patient was.....	5.01
The net cost per patient was.....	4.84

We qualified and entered upon our duties as city physician, January 12, 1889. We found the city hospital prospering in the hands of an efficient corps of officers and employees, and Dr. J. H. Dunn, our predecessor, rendered us every possible courtesy and assistance in our new duties, which we sincerely appreciated.

Judging from Dr. Dunn's report (the first annual report of the city hospital, which see) that the institution had been a decided success financially and in all respects, we took charge feeling that the city hospital was no longer an experiment.

We determined to spare neither time nor expense in making the surroundings of the inmates as pleasant and comfortable as possible in every particular, especially to give them the very best care and the very best medical and dietetic treatment. Whether we have been successful or not in our efforts we leave that for others to decide.

We found the female ward having very few modern improvements and the building with no protection whatever in case of an accident by fire. By action of the council, at an expense of \$129, the much needed improvements were made and the building supplied throughout with stand pipes and hose attached which will reach to any part of the hospital in case of need, and a prompt response from the fire department is assured from the fact that there would be no delay in sending in an alarm as there is an American District Telegraph alarm box of easy access in the building.

But although the present building may be ever so well kept in repair and supplied with modern improvements, and the management be ever so unquestionable, yet the best interests of the patients are compromised on account of the poor construction and ill ventilation.

We need a new city hospital, and we trust the talk and thought of abandoning the plan of the city caring for its own sick in an institution of its own, and of again farming them out to other hospitals has been forever settled; for such a course would be unwise, non-progressive and presumptuous. This question has been discussed by every large city in the world and the conclusion has invariably been reached that to care for the city's sick elsewhere than in its own city hospital, was extravagant from an economic standpoint and prejudicial to the best interests of the patients. We believe the time is ripe for action on this question and we cannot too strongly urge that immediate action be taken by your honorable body for the consummation of some plan whereby grounds suitably located shall be secured and a suitable building be erected which shall be an ornament to our prosperous and rapidly growing city. We are certainly no less progressive in many respects than our rival neighbor, St. Paul, but we certainly are far behind the times as compared with her in regard to a city hospital. She has already erected, by way of beginning, a structure at the cost of \$50,000, and has appropriated an additional \$100,000 for extending the plant.

My recommendation would be that you first determine just what kind of a building in every particular is wanted, and then consult some reliable architect as to the cost. At the present time we really need a building which will accommodate at least seventy-five patients, suitably provided with laundry, kitchen, &c., and so arranged that fever, surgical, obstetrical and contagious diseases could be properly classified and isolated.

As to the expenses of the city hospital, we would state that the purchase of medical supplies and surgical appliances has been left to our discretion, while all other expenditures have been made by the Committee on Health and Hospitals. It has been the aim of the management to secure the very best of everything at the least possible expense. And we are satisfied that the affairs have been managed as economically as in any other institution of a like grade: which may be verified by reference to reports from other Hospitals.

Our death rate is very low, being only about ten per cent. You will realize this more fully when you consider the class of cases admitted to the city hospital. Many of the cases brought in by patrol are moribund; many cases of phthisis are in the very last stage, and typhoid cases in the second and third week of the disease—some dying within twenty-four hours of admission.

Our record on typhoid fever is almost unparalleled. Of the 135 cases treated you will notice from the tabulated statements that only twelve died, making the death rate only 8.9 per cent. Pennsylvania hospital in a record for twenty years, 1862 to 1881, shows the death rate to have ranged from 8.3 to 37.5 per cent. Only one year, 1863, was the rate less than 10 per cent.

This record speaks louder than words for the efficiency of our corps of nurses—the more so because in an unusually large proportion of the cases pneumonia existed as a complication—for in no disease is good nursing more indispensable than in typhoid fever. This remark seems the more fitting from the fact that the statement has been publicly made by some unfriendly to our city hospital that the patients did not receive proper care.

Dr. P. M. Holl, the assistant city physician, and myself have made about 5,000 visits on the sick and injured, at their homes, city hospital, city hall, police station, workhouse and jail. We have found in Dr. Holl a very able assistant, and we desire to express our confidence in him and our apprecia-

tion of his untiring and conscientious devotion to the arduous duties of his office. We also appreciate most fully the hearty co-operation of all associated with us in the work at the hospital.

The young lady representatives of Flower Missions, Mission Bands, Christian Workers and Young Ladies' Christian Temperance Union of the city, ever thoughtful of the sick in hospital, administer to their wants in a manner most becoming the sick room by bringing luscious fruits, lovely flowers and cheering words. They are always welcome, and their acts of kindness are fully appreciated by the unfortunate sick and all interested in the welfare of the city hospital.

We most heartily thank all the members of the medical profession for professional courtesies and valuable services rendered in consultation; among whom we think it fitting to make special mention of some who have kindly and gratuitously rendered us timely assistance in their specialties: Drs. Bell, Abbott, Dunn, J. E. Moore, Allport and Spratt, Jones and Laton.

In closing we wish to extend our thanks to the Superintendent of the Poor, with whom we have been most intimately and pleasantly associated; the Committee on Health and Hospitals, the Supervisors of the Poor and the council, for their co-operation with us in furthering the interests of the institution with which we are connected.

Very respectfully yours,

CHARLES A. CHASE,

City Physician.

Medical Cases.

	Male.	Female.	Total.		Male.	Female.	Total.
Typhoid fever	85	50	135	Threatened abortion	1	1	1
Acute articular rheumatism.....	33	7	40	Obstruction of bowels.....	1	1	1
Phthisis pulmonalis.....	17	5	22	Eczema and rothlen.....	1	1	1
Alcoholism, acute.....	10	4	14	Measles.....	1	1	1
chronic.....	2	1	3	Scrofula.....	1	1	1
Acute pneumonia.....	13	1	14	Thermic fever.....	1	1	1
Bronchitis, acute.....	7	4	11	Nervous prostration.....	1	1	1
chronic.....	3	..	3	Endocarditis.....	1	1	1
Insanity.....	8	2	10	Constipation.....	1	1	1
Diarrhœa, acute.....	6	2	8	Miscarriage.....	1	1	1
chronic.....	4	1	5	Cervical adenitis.....	1	1	1
Paralysis, local.....	9	1	10	Lumbago.....	1	1	1
Valvular disease of heart.....	3	4	7	Gastro-enteritis.....	1	1	1
General debility.....	5	2	7	Chronic laryngitis.....	1	1	1
Pleuritis, acute.....	4	1	5	Neuralgia, frontal.....	1	1	1
chronic.....	1	..	1	intercostal.....	1	1	1
Tonsilitis, acute.....	2	3	5	Empyema.....	1	1	1
Delirium tremens.....	4	1	5	Infantile paralysis.....	1	1	1
Peritonitis, acute.....	3	2	5	Dementia.....	1	1	1
chronic.....	..	1	1	Uterine displacement.....	1	1	1
Asthma, chronic.....	4	..	4	Cirrhosis of liver.....	1	1	1
Malaria.....	4	..	4	Dysentery, acute.....	1	1	1
Cephalalgia.....	1	2	3	Inanition.....	1	1	1
Pregnancy.....	..	3	3	Gastric ulcer.....	1	1	1
Dyspepsia.....	2	1	3	Cholera morbus.....	1	1	1
Fœbricula.....	2	1	3	Carcinoma of stomach.....	1	1	1
General tuberculosis.....	2	1	3	Spinal anæmia.....	1	1	1
Opium habit.....	2	1	3	Acute.....	1	1	1
Epilepsy.....	2	1	3	Meningitis chronic cerebral....	1	1	1
Migraine.....	..	2	2	Menorrhagia.....	1	1	1
Hydatid of liver.....	2	2	4	Melancholia.....	1	1	1
Meningitis, cerebral.....	2	..	2	Hystero epilepsy.....	1	1	1
spinal.....	1	1	2	Myelitis.....	1	1	1
Cystitis.....	1	1	2	Acute pernicious anæmia.....	1	1	1
Hysteria.....	..	1	1	Rheumatoid arthritis.....	1	1	1
Purpura rheumatica.....	..	1	1	Cases unclassified, infants, etc.	4	4	8
Paralysis of bladder.....	..	1	1				
Chronic cystitis and sciatica....	1	..	1	Total.....			396

Surgical Cases.

	Male.	Female.	Total.		Male.	Female.	Total.
Fracture, ribs.....	1	1	1	Fracture, meta carpal.....	1	1	1
ribs, sc'lp, wd. & hernia	1	1	1	leg, compound.....	4	4	4
humerus.....	2	2	2	patella, skull, crush'd	1	1	1
radius and ribs.....	1	1	1	fingers, etc.....	1	1	1
skull.....	2	2	2	os innominatum and	1	1	1
fibula.....	1	1	1	multiple injuries..	1	1	1
clavicle (old).....	2	2	2	Dislocation, old hip.....	1	1	1
femur.....	1	1	1	thumb.....	1	1	1
potts.....	1	1	1	shoulder.....	1	1	1
colles, comp'd nasal &	1	1	1	Contused wound, knee.....	1	1	1
sprained knee.....	1	1	1	Incised wound, eyelid.....	1	1	1
vertebrae.....	2	2	2	side.....	1	1	1
inferior maxillary.....	4	4	4	multiple of face	1	1	1
colles.....	1	1	1	neck and back..	1	1	1
Contused wound, elbow.....	1	1	1	Lacerated w'd, scalp.....	1	1	1
head.....	1	1	1	head and face..	1	1	1
side.....	1	1	1	hand.....	1	1	1
back.....	1	1	1	Gunshot w'd, shoulder.....	1	1	1
face.....	1	1	1	abdomen.....	1	1	1
scalp.....	1	1	1	face.....	1	1	1
face and head.....	3	3	3	leg.....	2	2	2
forearm.....	1	1	1	face and hand....	1	1	1
leg.....	1	1	1	Syphilis.....	5	5	10
face, head and	1	1	1	Abscess, epigastric.....	1	1	1
neck.....	1	1	1	perityphlitic.....	1	1	1
ankle.....	4	1	5	orbital and enucleat'n	1	1	1
Synovitis, wrist.....	2	2	2	of eye.....	1	1	1
ankle.....	2	2	2	inguinal.....	1	1	1
knee.....	3	3	3	hepatic.....	1	1	1
elbow.....	1	1	1	peroneal.....	1	1	1
Amputation, fingers.....	3	3	3	mastoid.....	1	1	1
arm.....	1	1	1	ischio-rectal.....	1	1	1
Burn.....	2	2	2	Hæmatocele.....	1	1	1
Stricture urethra.....	1	1	1	Cataract (operation).....	4	4	4
Gonorrhœal rheumatism.....	4	4	4	Septicæmia.....	1	1	2
Ulcer, chronic, of leg.....	5	3	8	Punctured wd., ear.....	1	1	1
cornea.....	3	3	3	Gonorrhœa.....	2	4	6
Ophthalmia.....	1	1	2	Tallipes.....	1	1	1
Cellulitis, leg.....	1	1	1	Hydropho nephrosis.....	1	1	1
Concussion of brain.....	1	1	1	Bubo.....	2	2	2
Hip joint disease.....	2	1	3	Paraphymosis.....	1	1	1
Injury to spine.....	1	1	1	Necrosis, malleoli.....	1	1	1
Webbed fingers.....	1	1	1	os calcis.....	1	1	1
Phymosis.....	1	1	1	sternum.....	1	1	1
Thrombosis, leg.....	1	1	1	Sprained ankle.....	4	4	4
Internal injuries.....	3	3	3	Purulent conjunctivitis.....	1	1	1
Alexander's operation.....	1	1	1	Inflamed eye.....	2	2	2
Ovariectomy.....	2	2	2	Pott's disease of the spine.....	4	4	4
Lacerated cervix.....	2	2	2	Periostitis, leg.....	1	1	1
Operation for ante flexion.....	1	1	1	Varicose veins.....	1	1	1
Uterine fibroid.....	1	1	1	Hernia and bubo.....	1	1	1
Gonorrhœal pelvic cellulitis.....	2	2	2	Flat foot.....	1	1	1
Vesico-vaginal fistula.....	1	1	1	Strangulated hernia.....	2	2	2
Subluxation knee.....	1	1	1	Entropium.....	1	1	2
Carbuncle.....	1	1	1				
Osteo sarcoma.....	1	1	2				
Carcinoma of testicle.....	1	1	1				
				Total.....	162	16	179

AGE OF PATIENTS.

Under twelve months.....	4	From forty to fifty years.....	80
From one to ten years.....	4	From fifty to sixty years.....	38
From ten to twenty years.....	51	From sixty to seventy years.....	15
From twenty to thirty years.....	260	From seventy to eighty years.....	2
From thirty to forty years.....	121		
		Total.....	575

NATIONALITY OF PATIENTS.

Swedes.....	181	Scotch.....	3
Americans.....	96	Icelanders.....	3
Norwegians.....	91	Bohemians.....	3
Irish.....	80	Hungarians.....	2
Germans.....	51	Roumanian.....	1
English.....	18	Persian.....	1
Danes.....	10	Hollander.....	1
Canadians.....	7	Chinese.....	1
Russians.....	7	Italian.....	1
French.....	7	Newfoundlander.....	1
Negroes.....	6		
Poles.....	4	Total.....	575

OCCUPATION OF PATIENTS.

Laborers.....	250	Painters.....	8
Domestics.....	123	Shoemakers.....	8
Seamstresses.....	18	Farmers.....	8
Carpenters.....	14	Housekeepers.....	7
Laundresses.....	10	Printers.....	2
Cooks.....	9	Photographers.....	2
Firemen.....	5	Horseshoer.....	1
Clerks.....	5	Publisher.....	1
Coopers.....	5	Electrician.....	1
Lumbermen.....	4	Bartender.....	1
Teamsters.....	4	Woodcarver.....	1
Nurses.....	4	Spinner.....	1
Bakers.....	4	Collector.....	1
Barbers.....	4	Rubber stamp maker.....	1
Waiters.....	4	Switchman.....	1
Tailors.....	4	Polisher.....	1
Machinists.....	4	Artist.....	1
Sailors.....	3	Plumber.....	1
Moulders.....	3	Bookbinder.....	1
Blacksmiths.....	3	Soldier.....	1
Teachers.....	3	Cash boy.....	1
Tramps.....	3	Coachman.....	1
Peddlers.....	3	Drayman.....	1
Butchers.....	3	Cabinet maker.....	1
Schoolboys.....	3	Dentist.....	1
Agents.....	3	Brakeman.....	1
Students.....	2	Watchman.....	1
Engineers.....	2	Veterinary surgeon.....	1
Book keepers.....	2	Conductor.....	1
Hostlers.....	2	Factory girl.....	1
Millers.....	2	Saloon keeper.....	1
Masons.....	2	Porter.....	1
Druggists.....	2		
Stone cutters.....	2	Total.....	575

RELIGION.

Lutheran.....	309	Universalist.....	3
Roman Catholic.....	124	Congregationalist.....	1
None.....	57	Christian church.....	1
Methodist.....	40	Salvation army.....	1
Baptist.....	18	Jewish.....	1
Presbyterian.....	15		
Episcopallan.....	5	Total.....	575

SOCIAL CONDITION.

Single.....	427	Widowed.....	62
Married.....	86		
		Total.....	575

Number of Deaths and Causes.

	Male.	Female.	Total.		Male.	Female.	Total.
Typhoid fever.....	10	2	12	Fracture of skull.....	2	.....	2
Phthisis pulmonalis.....	7	1	8	Syphilis.....	1	.....	1
General tuberculosis.....	6	.....	6	Oedema of lungs.....	1	.....	1
Pneumonia.....	5	.....	5	Chronic cerebral meningitis.....	1	.....	1
Peritonitis.....	3	1	4	Infantile paralysis.....	.....	1	1
Valvular disease of the heart..	1	2	3	Carcinoma of the stomach.....	1	.....	1
Shock from burn.....	1	2	3	Traumatic gangrene of leg (R.	.....	.....	.....
Shock from being crushed in	.....	.....	.....	R. injury).....	1	.....	1
railroad accident.....	1	2	3	Hæmorrhage and suppurative	.....	.....	.....
Shock from amputation for ca-	.....	.....	.....	synovitis.....	1	.....	1
pillary hæmorrhage from burn	1	2	3	Septicæmia and suppurative	.....	.....	.....
Spinal meningitis.....	.....	.....	.....	synovitis.....	1	.....	1
Cerebral meningitis.....	.....	.....	.....	Inanition.....	1	.....	1
Potts' disease of the spine.....	.....	.....	.....	Bright's disease.....	1	.....	1
Cirrhosis of the liver.....	.....	.....	.....	
Chronic alcoholism.....	1	1	2	Total.....	53	10	63

ANNUAL REPORT

OF THE

INSPECTOR OF BUILDINGS,

Of the City of Minneapolis.

DEPARTMENT OF INSPECTOR OF BUILDINGS.

JOHN M. HAZEN,	-	-	Inspector of Buildings.
CLAYTON R. HAZEN,	-	-	Clerk of Department.
J. W. WOODMAN,	-	-	Assistant Inspector.
JOHN ALMQUIST,	-	-	Assitant Inspector.
MARTIN MACHALE,	-	-	Assistant Inspector.
JACOB SITZE,	-	-	Plumbing Inspector.

ANNUAL REPORT

OF THE

INSPECTOR OF BUILDINGS,

MINNEAPOLIS, MINN.

To the Honorable the City Council of the City of Minneapolis:

Gentlemen—In compliance with the provisions of a resolution adopted by your honorable body, November 1, 1889, I have the honor to submit the fifth annual report of this department, embracing the fourth quarterly report for 1889, together with a recapitulation of the year's business.

PERMITS.

All person engaged in the performance of the following classified work are required by city ordinances relating to the construction, repairs and removal of buildings in the city of Minneapolis, to obtain a permit from the inspector of buildings before proceeding thereon.

We have issued from this department during the year 1889, 6,339 permits, classified as follows:

For brick and stone stores.....	66
For veneered store buildings.....	7
For wood store buildings.....	51
Miscellaneous buildings, includes churches, schools, office buildings opera houses and halls.....	223
Brick and stone dwelling houses.....	38
For veneered dwellings.....	60
Two story and over, frame dwellings.....	1,001
One and one-half story frame dwellings.....	133
One story frame dwellings.....	51
For barns of wood, brick and stone.....	544
Additions, alterations and repairs.....	2,181
Permits for moving buildings.....	556
Permits to do plumbing.....	1,428

By an examination of the above statement, it will be seen that the work of the department for this year, compares favorably with that of previous years.

The promiscuous erection of buildings without regard to the material used, or manner of construction, prior to 1884, was the immediate cause of directing attention to the necessity for a stringent building law, which was adopted by the city council, February 28, 1884, and has been amended from time to time through authority of the council, up to the present.

We have in our "fire limits" a special law governing the construction and removal of buildings. It regulates the thickness of walls, height of stories, kind of roof, division and partition walls, etc., that fire occurring shall be confined to the premises. That every building erected or enlarged within the fire limits, shall be built of brick, stone, iron or other incombustible material. The repairing of wooden structures, in the fire limits are a constant source of annoyance, as by our laws, necessary repairs not affecting the construction of the external or party walls, roof, chimneys or stairways, may be allowed. In many instances repairs are constantly going on from year to year until the old wooden structure is entirely replaced, leaving a wooden building of inflammable and dangerous character, where it would be impossible to obtain a permit to erect a like building.

Improvements and the erection of new buildings on leased land call for the most rigid inspection on the part of the department, and while they conform to the ordinance in every particular, many very cheap buildings are put up. While I do not censure the parties building—for they are anxious to get a place to do business in at as little expense as possible—yet I do think it detrimental to the best interests of as beautiful a city as Minneapolis is, for

owners of vacant property on our business streets to lease it for a year or two to be covered with one-story unsightly shanties.

Examinations are the daily outside work of the department and consist of the constant supervision of all buildings in course of construction, alteration or being repaired, dangerous buildings, unsafe chimneys, buildings damaged by fire, fire escapes and stand pipes, smoke houses, area walls, brick ovens, dangerous brick walls, plumbing and drainage, and when the number of square miles (53) contained within the city limits are taken into consideration and the number of assistants who have all this territory to traverse, making a detailed statement of each and every examination, beside those made at the request of our citizens, which are not included in this report, it becomes a task of no mean proportion, in connection with the responsibility attached.

The whole number of examinations made during the year 1889 is 4,147, and classified as follows:

Of new buildings in process of erection.....	2,500
Examination of plumbing.....	1,275
Of reported dangerous plumbing.....	48
Of final examinations of new plumbing.....	308
Of freight and passenger elevators examined.....	16

PLUMBING.

The work of this department is increasing rapidly, with a general desire on the part of the plumbers to do good work, and with few exceptions have joined hands with this and the health department, in enforcing the law and leaving their work in the best sanitary manner. Am pleased to say from personal observation and reliable information, Minneapolis does as good sanitary plumbing as any city in the world, none excepted. It frequently occurs that numerous tests and inspections have to be made on a single job, but generally one test and one examination is all that is required. The first thing is a permit to do the plumbing, the next is the "roughing in"—that means the placing of all the iron pipe within the building, the calking of every joint that is to be calked, then the openings are sealed and five pounds air, or water pressure applied, if found satisfactory the inspector notes the same on the plumber's permit. Next is the inspection of the finished work, and in accordance with the ordinance, the plumber gets a certificate to that effect, which releases him from further responsibility in the matter. Right here I wish to say that I believe the department would be greatly benefitted if the examination and licensing of plumbers came under the supervision of this department.

The whole number of plumbing permits issued during the year 1889, is 1,428 the estimated cost of which is \$321,088.

Number of examinations of plumbing.....	1,275
Examination of reported dangerous plumbing.....	48
Tests of soil pipe and drain with water.....	308
Tests of soil pipe and drain with air.....	612
Finished work, final examination made.....	308

ELEVATOR AND HOIST-WAYS.

By a complication of numerous difficulties elevators and hoist-ways have not had the rigid inspection heretofore they ought to have had. However, during the last half of the past year a perfect system has been inaugurated for the inspection and recording of the same, date when inspected, condition at the time of inspection and by whom inspected, but for want of an opportunity, the inspector's time being taken up by other work, but few have been examined up to December 31, 1889.

I would recommend that a fee of one dollar be charged and a certificate be given and placed in the cab of the elevator.

There has been sixteen freight and passenger elevators inspected and recorded as in good order.

INJURED.

A. Hageboeck, injured on the small hoist-way in the Schultz block, Washington avenue north between Second and Third avenues, June 28, 1889. No safety appliance. He stepped on the platform and it dropped to the bottom with him.

FIRE ESCAPES.

The best, safest and most direct means of egress from burning buildings which were constructed without any reference to the requirements in such cases, demands and receives the most thoughtful consideration of this department. This question is of the utmost importance and should command the thoughtful consideration of our architects and builders.

Fire escapes which demand the strength and agility of an athlete for their use, have no virtues that can commend them for the use of women and children. Consequently where there are women and children employed or living on the third floor, or above, there should be an iron stair with iron hand-rail leading to the second floor at least.

This department has served 110 notices to put up fire escapes and about 40 have been erected up to January 1, 1890.

PROSECUTIONS.

The general disposition to maintain the law, on the part of our builders and architects, has materially aided this department in the discharge of its duties. It has been the aim of the department to settle all questions in dispute amicably and to the satisfaction of all concerned, and in the majority of cases has been successful. However, the payment of the following fines has had a salutary effect upon the plumbers and builders generally:

VIOLATIONS.

May	1.	E. M. Pike. Violation of plumbing ordinance. Plumbing done by a tinner and no permit. Fined.....	\$5.00
	9.	John Lee. Violation of building ordinance. Defective chimney. Sentence suspended by defendant complying with ordinance.	
		Charles Olson. Violation of house-moving ordinance. Left building standing in street. Fined.....	10.00
	24.	L. Groff. Violation of building ordinance. No permit. Sentence suspended by defendant complying with the law.	
		N. L. Cooper. Violation of building ordinance. No permit to build shed. Fined.....	5.00
		A. Dinsmore. violation of building ordinance. No permit. Fined.....	5.00
		Mr. Smith, banker at Sauk Center. Violation. Wood-supports to sidewalk in fire limits. Sentence suspended.	
	29.	F. A. Dunsmore. Violation of building ordinance. No permit. Guilty. Sentence suspended.	
		J. Q. Stone. Violation of building ordinance. No permit. Fined.....	10.00
		A. Dinsmore. Violation of building ordinance. No permit. Guilty. Sentence suspended.	
		J. P. Buchanan. Violation of building ordinance. Wood engine-house in fire limits. Warrant held over him.	
June	12.	John B. Bottineau. Violation of building ordinance. Stove-pipe out through the roof. Sentence suspended, giving defendant time to comply with ordinance.	
		John O'Brien. Violation of building ordinance. Stove-pipe run out through roof. Sentence suspended.	
	14.	David Kreklau. Violation of building ordinance. Building area wall without permit. Sentence suspended.	
	21.	E. C. Cauvet. Violation of plumbing ordinance. Doing work without permit. Sentence suspended.	
		H. Kelley. Violation of plumbing ordinance. Doing work without permit. Fined.....	10.00
		E. Bufton. Violation of plumbing ordinance. Doing plumbing without permit. Fined.....	10.00
		T. P. Healey. Violation of building ordinance. Building chimney wall four inches. Sentence suspended.	
July	9.	J. Frank Collom. Violation of building ordinance. Building without permit.	
		W. H. Lang. Violation of building ordinance. Building without permit. Fined.....	5.00
	15.	Fred Watchmuth. Violation of plumbing ordinance. Plumbing without license. Fined.....	20.00
	29.	B. S. Griswold. Violation of building ordinance. Moving house without a permit. Fined.....	10.00
		Howard A. Turner. Violation of building ordinance. Putting in elevator without fire-proof shaft or automatic doors. Discharged on promise of putting on fire-proof doors.	
Aug.	11.	D. M. Gilmore, Edward E. switzer, John Campbell. Violation of plumbing ordinance. Dismissed.	
	12.	W. T. Savory. Violation of building ordinance. Putting elevator in Syndicate block without permit. Fined.....	10.00
	15.	J. E. Plummer. Violation of building ordinance. Chimney on brackets. Dismissed.	
Oct.	12.	W. W. Sykes. Violation of plumbing ordinance. Plumbing a church without a permit. Fined costs.....	3.00

Oct. 17.	A. Abercromby. Violation of plumbing ordinance. Plumbing hotel without permit. Fined.....	10.00
	Hurley & Jimmison. Violation of plumbing ordinance. Plumbing hotel without permit. Fined.....	10.00
Dec. 18.	C. C. Lyford. Violation of building ordinance. Enlarging barn in fire limits without permit. Fined.....	10.00
	Hoops & Gorham. Violation of building ordinance. Failed to comply with notice to put up a fire escape on Windsor hotel. Continued.	
	W. W. Huntington. Violation of building ordinance. Failed to comply with notice to put on fire escape on hotel building. Continued.	
23.	C. C. Lyford. Violation of building ordinance. Building combustible building in fire limits. Fined.....	10.00
28.	D. S. Easterbrook. Violation of building ordinance. Building wood building in fire limits. Fined.....	10.00
	J. S. O'Donnell. Violation of building ordinance. Building of wood in fire limits at No. 606 Hennepin avenue. Fined.....	5.00
	August Scheiby. Violation of building ordinance. Discharged.	

The issuing of permits to use the street for the purpose of building properly belongs to this department, and the time to get such permit is when the permit to build is issued.

The setting of steam boilers for heating or other purposes, building of brick ovens, setting of coffee roasters, building of smoke houses, passenger or freight elevators, all should require a permit before commencing such work, which would save this department a vast amount of work and enable us to locate them at once, that they might receive proper inspection during construction.

The value and importance of the work, and the compiled reports of the department, quarterly and annually, are little understood by the general public. The average business man in his daily rush merely glances at the headings and goes on.

The practicability of our building laws are such, that all who have to do with it, understand each point and heartily commend it.

The duties of the department are constantly increasing, which is due, in a great measure, to the strict attention given to details by assistants. The system employed in accomplishing our work is most satisfactory. A rigid enforcement of the building laws secures safety against fire, and a prevention of swift destruction when on fire, and it means safety and durability.

Very respectfully,

J. M. HAZEN,

Inspector of Buildings.

ANNUAL REPORT
OF THE
INSPECTOR OF LIGHTS,
Of the City of Minneapolis.

A. P. ANDERSON, - - Inspector.

ANNUAL REPORT
OF THE
INSPECTOR OF LIGHTS,
MINNEAPOLIS, MINN.

To the Honorable City Council:

GENTLEMEN—In compliance with the resolution, I herewith submit my annual report for the fiscal year ending December 31, 1889.

MONTH.	ELECTRIC.		GAS.		GLOBE GAS.		WHEELER REFLECTOR.		SUN VAPOR.	
	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.
January	5	\$2.05	100	\$6.50						
February.....	101	41.41	150	9.95						
March.....	94	38.55	224	14.56	44	\$3.52	16	\$1.28	2	
April.....	82	33.62			13	1.04			2	\$.16
May.....	45	18.60	4	.26	13	1.04	6	.48	8	.64
June.....	218	98.82			28	2.24	13	1.04	18	1.44
July.....	111	45.50			13	1.04	40	3.20		
August.....	487	254.00	2	.13	14	1.12	5	.40	6	.48
September.....	701	304.00			21	1.68			8	.64
October.....	336	138.00			40	3.20	8	.64	8	.64
November.....	305	125.00					8	.64	8	.64
December.....	634	260.00			16	1.28	18	1.44	16	1.28
Total.....		\$1,359.55		\$31.40		\$16.16		\$9.02		\$6.40

"A"—Number of lights out.

"B"—Amount deducted from bill.

Various items in the bills, amounting in all to \$74 and specified as lamps illegally broken, have, upon investigation, been found to be without foundation and the amount not allowed.

By careful investigation I have found errors to the amount of \$450 in the number of electric lights reported by the Brush Electric Company as having been lighted.

The total saving to the city, for the year, in addition to a better service, due to diligence in watching the lights, has been, as will be seen by the above report, \$1,946.52.

Respectfully submitted,

A. P. ANDERSON,

Light Inspector.

ANNUAL REPORT

OF THE

INSPECTOR OF MEATS,

Of the City of Minneapolis.

MEAT INSPECTION DEPARTMENT.

D. T. DAVIES, - - - - - Inspector.
WYMAN COSTIGAN, - - - Assistant Inspector.

ANNUAL REPORT
OF THE
INSPECTOR OF MEATS,
MINNEAPOLIS, MINN.

To the Honorable City Council of the City of Minneapolis:

In compliance with the request of the city council I have the honor to herewith submit my annual report, showing the conditions of the meat markets, slaughter houses, bakeries and other places in the city for the preparation of human and sale food that come under my inspection, and the kinds and amount of meat, fish, bread and other food condemned during my administration in 1889, beginning February 1.

Before giving the summary below I desire to make the following comments and recommendations. Minneapolis has to-day eleven wholesale meat markets, two hundred and twenty-eight retail meat markets, fifty-three bakeries, two slaughter houses and forty-one commission houses, besides a number of fish markets and other small places for the sale of human food that come under my immediate inspection as city meat inspector. These places, especially those most in need of inspection, have been visited during the year either by the inspector or his deputy as frequently as possible. There has been a strong and persistent tendency on the part of many to crowd into the market unhealthy, unwholesome and deleterious meat, fish, fowls, vegetables, fruit and other provisions intended to be sold for human food, during the past eleven months. We have condemned fifty-seven thousand six hundred and fifty-two and one-half pounds ($57,652\frac{1}{2}$) of meat, veal, salt beef, fresh beef, fresh pork and smoked ham being the kinds most condemned; the figures show also that we have condemned a greater amount of beef than pork; this is due to the fact that the amount of beef that is used in our market is far in excess of the amount of pork; a large percentage of our condemning is of meats infected with parasites and meat from animals which have died from lingering diseases or accident or natural causes, also all meats tainted or in a state of putrefaction, or meat from animals slaughtered while in a heated state, heated from driving or otherwise and not allowed to cool before killing; this has a strong tendency to hasten decomposition and make the meat unwholesome, or meat which is packed for the market before it has had sufficient time to cool, or meat that is packed too tightly, the result is premature decay. Young calves, too young for human food, some not more than five days old, are constantly being brought in for market, and this too in spite of our ordinance requiring that they shall be at least five weeks old before being offered for the market, but the enforcement of this ordinance and the too frequent visits of the inspector, have very nearly if not entirely dispensed with this practice. The inspector considers no kind of meat so dangerous as bad sausage, bad sausage meat or bolognas, the waste scraps and decayed meat too often ground into them cause them to quickly mould and decay and become entirely unfit for human food, if they are not from the first. As to the bakeries, some of them are kept very neat and wholesome and it is a pleasure to visit them, while others, some of the smaller, poorer ones are especially in hot weather and fly time too greasy and filthy to be permitted to keep open; such places were made to at once clean up or quit business. All bread and bread stuff condemned on account of shortage of weight or

mould or other causes, is not spoiled by the inspector but is seized and confiscated to the city, and the inspector would herein respectfully recommend that all bread condemned for a shortage of weight and seized by the inspector be turned over to the superintendent of the poor for his general distribution.

I also recommend the building of a public city slaughter house, to be under the management and control of the city meat inspector; and in closing I will only add that when we consider the amount of the unwholesome and poisonous food necessarily condemned and saved from the mouths of innocent people it will be difficult to estimate its value to Minneapolis, or how much it has contributed to the health of her people.

Summary of Meat, Etc., Condemned from February 1 to December 31, 1889.

	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Veal	1,824	668	1,091	617	542	4,381	590	637	846	427	350	11,973
Chickens	18,25	150	104	67	391			38	32	505	3,339	6,351
Turkeys	910	33								163	352	1,448
Fish	492	110	150	61	222		99	253	109	105	347	1,948
Mutton	261	219	163	40	250	611	607	154	350	40	80	2,775
Lamb				61	21	284	174	30	118			688
Pigs feet	80		44	30							100	254
Salt pork	40		240		105	400	200	155	38	60	91	1,575
Fresh pork				323	32	305	325	218½	621	90	1,674	3,488½
Fresh beef	353	245	203	314	677	863	736	645	801	668	780	6,285
Salt beef	376	50	1,165	1,855	70	183	853	1,881	1,625	2,225	760	11,043
Pork sausage	185	127	113	50	50	62		30	32		68	717
Bologna sausage		35	214	107	98	114	135	56	103	78		940
Liver sausage								15	15			30
Vienna sausage						27				44		71
Summer sausage					64							64
Smoked hams	141		80	90½	282	377	382	588½	169	81	38	2,229
Smoked shoulder				43		82	40					165
Smoked bacon						19	26			55	145	245
Bologna meat						150	445	250	688	65		1,598
Dressed poultry					330	1,156						1,486
Venison										1,592	58	1,650
Dressed ducks											530	539
Dressed geese											47	47
Cooked corn beef		43										43
Total	6,487	1,670	3,567	3,763½	3,175	9,014	4,512	4,951	5,547	6,198	8,768	57,652½

Rabbits, 19; prairie chickens, 21; wild ducks, 13; blackberries, 57 cases; grapes, 88 baskets; tomatoes, 45 boxes.

Respectfully submitted,

DANIEL T. DAVIES,

Inspector.

ANNUAL REPORT
OF THE
CITY SEALER OF WEIGHTS
AND MEASURES,
Of the City of Minneapolis.

A. G. MOSHER, - - - - City Sealer.

ANNUAL REPORT
OF THE
SEALER OF WEIGHTS AND MEASURES,
MINNEAPOLIS, MINN.

MINNEAPOLIS, MINN., January 15, 1890.

To the Honorable City Council:

GENTLEMEN—In accordance with a resolution passed by your honorable body November 1st, 1889, calling for a detailed report from the heads of the several departments of the city government, to be submitted annually to the city comptroller, on or before January 15th of each and every year, I herewith submit the following report for the year ending January 1st, 1890.

I have visited during the year 1,540 places of business where either weights or measures were used in the transaction of business. I have examined and tested, and either found correct, repaired or condemned 3,035 sets of scales. I have examined and tested, and either found correct or condemned 4,951 different kind of measures. I have had repaired, at no expense to the owner, 127 sets of scales. I found it necessary to condemn 27 sets of scales. I have also condemned 203 measures of different kinds. I have also weighed or caused to be weighed 107 loads of coal during the year, not on the city scales, but on street scales that I had previously tested that are situated in those portions of the city where the coal was being mostly delivered, which I had a right to do according to the ordinance governing the same. I have found but a very few instances where the parties, in my judgment, were deliberately trying to cheat the public by short weight or measure. Those parties I have since watched as closely as possible, under the circumstances, but have yet to find the first case where an arrest for a violation of the ordinance would be justifiable. I have in all cases tried to avoid the necessity for an arrest, by appealing to the better nature of those parties whom I suspected of giving light weights and measures, and trying to point out to them the fact that it was for their own interests not to do so, believing that was better than to try and put up some job on them whereby I might have them arrested for the sake of a little notoriety for myself, which I am not seeking at the expense of my fellow man. I have collected during the year the sum of \$1,123.45 in fees. I have paid out for an assistant \$250. He was a first-class mechanic, and helped to repair a good many sets of scales that would otherwise have had to go to some scale company at considerable expense to the owner, for which I never charged a cent, as the ordinance does not allow the officer to make any charge for repairs. Neither does it imply that the officer shall make any repairs, but I had it done in a good many cases because I saw that it would be but a small matter, and would save the owner an unnecessary bill of expense and would make him have a better appreciation of the office and of the officer than he had heretofore done, as I soon found when I first started out in the beginning of the year that most merchants considered the ordinance an unnecessary tax and burden for which they had heretofore received little or no benefit as conducted by some of my predecessors. I have found a good many scales and measures that were against the owners and in favor of the public, and I sincerely believe that a majority of those that were against the public was more through the carelessness of the

owners than from any intention on their part to have them so. I am satisfied from my experience of a year as city sealer that shortage in weights and measures (and there are no doubt a good many instances of it) is done by deliberately weighing out less than has been paid for on scales that are right, or measuring out less than has been sold or paid for in measures that are right, by not filling the measures full. Parties who do that kind of business are usually too sharp not to have their scales and measures all right, and the first thing they will say, if accused of shortage, will be to tell you that their scales and measures have all been tested by the city sealer, and show his stamp on the same. In my judgment, the only way to correct the evil of shortage in weights and measures is to amend the present ordinance so as to make it a misdemeanor, punishable by fine or imprisonment or both, for any person to weigh or measure out any less quantity than they have received pay for, and to give the proper officer authority to make complaints and arrests for the same on what would seem to be reliable information. I wish to add in closing my report, that the universal feeling among the merchants and dealers in general is that the officer should be paid by the city, the same as all other inspectors are. It would certainly do away with the tendency of a good many dealers to spirit away a large portion of their measures and weights about the time they find the officer is coming around, to prevent paying so much apiece for having them tested. There is much more that I could say in relation to the office and its duties, but I prefer to wait until I can speak more intelligently about them.

Very respectfully submitted,

A. G. MOSHER,

City Sealer of Weights and Measures.

ANNUAL REPORT
OF THE
LIBRARY BOARD,
Of the City of Minneapolis.

LIBRARY BOARD.

T. B. WALKER, - - - - President.
(Term expires 1895.)

E. M. JOHNSON, - - - - Secretary.
(Term expires 1891.)

J. B. ATWATER, THOMAS LOWRY.
(Term expires 1893.) (Term expires 1893.)

M. B. KOON. SVEN OFTEDAL.
(Term expires 1891.) (Term expires 1893.)

EX-OFFICIO.

The Mayor of the city.

The President of the Board of Education.

The President of the University of Minnesota.

LIBRARY SERVICE.

LIBRARIAN,
HERBERT PUTNAM.

ASSISTANTS,

JOSEPHINE CLOUD	KR. HEIBERG.
GRATIA COUNTYMAN.	LOUISE I. LYNKEY.
MIRIAM M. DAVIS.	MRS. M. C. NORTON.
JESSIE McMILLAN.	

PAGES.

JOHN FRALICK.	RUFUS HOLBROOK.
ROBERT KELSEY.	

JANITOR,
LEWIS A. RUNGE.

ANNUAL REPORT
OF THE
LIBRARY BOARD,

MINNEAPOLIS, MINN.

MINNEAPOLIS, MINN., January 31, 1890.

To the Honorable the City Council of the City of Minneapolis:

GENTLEMEN—Herewith you will find:

First. A review of the operations of this board from its creation to date.

Second. A statement showing the receipts and disbursements of this board for the past fiscal year.

Third. A statement showing the receipts and disbursements of this board from its creation to December 10, 1889.

Fourth. A statement showing the cost of the library building in detail, including the cost of the ground upon which it stands.

Fifth. A list of the subscribers to the building fund, with the amounts subscribed by each.

Sixth. A copy of the act creating this board.

Seventh. A copy of the contract entered into between this board and the Minneapolis Athenaeum.

Respectfully submitted,

By HERBERT PUTNAM,
Librarian.

THE LIBRARY BOARD,
Minneapolis, Minn.

REVIEW OF THE OPERATIONS OF THE LIBRARY BOARD OF MINNEAPOLIS,
FROM ITS CREATION TO DATE.

This board was created by an act of the legislature of the state of Minnesota, approved March 2, 1885, being an act amending the charter of the city of Minneapolis, so as to create and establish a board to be styled the "Library Board of the City of Minneapolis."

The stated purpose of such board was to establish and maintain in the city of Minneapolis public libraries and reading rooms, galleries of art and museums, for the use and benefit of the inhabitants of said city.

The same act named the following persons as members of the board, viz: Thomas Lowry, M. B. Koon, J. B. Atwater, Sven Oftedal, T. B. Walker, E. M. Johnson, together with the mayor of the city, ex-officio, the president of the board of education, ex-officio, and the president of the University of Minnesota, ex-officio.

At the first annual meeting of the board, held April 21, 1885, the terms of office of the six directors mentioned was by lot determined as follows:

Of Thomas Lowry and J. B. Atwater, one year; of Sven Oftedal and T. B. Walker, three years; of M. B. Koon and E. M. Johnson, five years. At the same meeting the following officers were elected: President, T. B. Walker; secretary, E. M. Johnson.

At the next succeeding meeting (February 1, 1885) by-laws were adopted. By these, three standing committees of the board, composed each of three members, were constituted, viz: Finance, building, library.

By section nine of the act, the board was empowered to "Enter into asso-

ciation with any independent society or other organization owning libraries or museums, or existing for purposes kindred to those contemplated in this act, upon such terms and conditions as shall best promote the object for which said board is created."

The first important act of the board was under this clause: a contract with the Minneapolis Athenæum, a corporation created in 1869 for the purpose of maintaining a library in the city of Minneapolis. By this contract (the text of which is appended) the library owned by the Athenæum, together with such additions as should be made to it from time to time, was to be placed in the library building to be erected by the library board, to be there used upon the same conditions as the collections belonging to the library board. The Athenæum further agreeing to contribute the sum of eight thousand (\$8,000) dollars towards the erection of the said library building, it being stipulated that the library board should in return bear all expenses of maintaining the Athenæum books, including insurance and binding, and the salary of an assistant librarian to have special supervision of the property of the Athenæum.

This contract is to endure for ninety-nine years from the date of its ratification by the library board, July 25, 1885.

By an act of the legislature approved February 28, 1885, the city of Minneapolis was authorized to issue bonds to the amount of one hundred thousand (\$100,000) dollars, the proceeds to be expended by the library board in the purchase of ground and the erection of a library building, provided that subscriptions to the amount of fifty thousand (\$50,000) dollars, for the same object, should be obtained from other sources.

The necessary proportion of subscriptions having been guaranteed, the bonds were accordingly issued. From the proceeds of these, of the subscriptions paid in, and of the annual tax levy authorized by the charter the board has proceeded to its work of the past four years.

October 6, 1885, a site was purchased on the corner of Hennepin avenue and Tenth street for the sum of fifty-two thousand, eight hundred (52,800) dollars. On February 20, 1886, the adjoining fifty feet on Tenth street was purchased for the sum of ten thousand (10,000) dollars. In the spring of 1886 five local architects were invited to submit plans for a library building, the board to pay for each rejected plan the sum of one hundred (100) dollars, the same to become the property of the board. Three non-resident architects also submitted plans without compensation. After an extended examination Messrs. Long & Kees, of Minneapolis, were chosen as the architects of the building.

Excavation was begun upon the ground in the summer of 1886, and the foundation and superstructure proceeded from that time onward. Unfortunate delays in certain of the contracts deferred the completion of the building from the spring of 1889 till late in the fall.

The library was formally opened on Monday, December 16, 1889. No local individual invitations were issued, but some two thousand were sent to official bodies throughout the United States, to newspapers, and to various literary and scientific institutions throughout the world. There were no formal exercises. The entire building with its various collections of literature, science and art, and with the added cheerful beauty of music and flowering plants, was thrown open and the entire public invited to inspect and enjoy it. The enthusiastic response showed the interest the institution had inspired. From four until ten o'clock thousands thronged its portals.

The pamphlet which is soon to be issued, illustrative of the library building, renders unnecessary any detailed description in this place. The following points may, however, properly be noted here:

The complete plan of the building as finally determined upon contemplated a quadrangle, 150 feet on Tenth street and about 116 on Hennepin avenue. It was decided to build only the Tenth street and Hennepin avenue sides at present, leaving the two inner sides to be finished when needed. The building is, as it stands, however, an organic whole, the two sides to be constructed simply furnishing further book rooms, museum rooms and galleries, in addition to those already available. The full frontage of the land on Tenth street being 190 feet and on Hennepin avenue, 132 feet, the quad-

range, when completed, will still leave a clear space of forty feet on Tenth street and of 16 feet on Hennepin avenue.

Second. As to the present capacity of the reading rooms and book rooms: the three main reading rooms, periodical, general and ladies', have a total floor area of 4,400 square feet, equivalent to a single room 40 feet in width by 110 feet in length, or sufficient accommodation for 250 readers. Additional rooms that may be utilized in the basement would raise this number to 300. To these facilities, however, should be added those provided in the book rooms for student reference. There are in the two book rooms sixteen alcoves, each eight feet by ten, twenty-two smaller alcoves with desks for a single investigator, a bay, twenty-four feet in diameter, forming in effect a reference reading room, also a medical reading room below with accommodations for some twenty readers, and the patent room with space for ten or fifteen more. The aggregate accommodations are thus far larger than from any single standpoint would be apparent. The reading space, instead of being concentrated, having been differentiated to suit the various different classes of readers.

Third. The capacity of the present shelving is about 80,000 or 90,000 volumes, or provision for about four years' increase to the present library. When needed, an auxiliary room may be extended back of the present delivery room, into what will be the court of the quadrangle. This will entail slight expense and may be done independently of the construction of the final rear wings.

During the winter of 1886-7, the librarian of the Athenæum had been engaged in the East in making up purchase lists of books for the library board as well as for the Athenæum.

In May, 1888, the sum of ten thousand (10,000) dollars was appropriated by the library board for its share of the purchase. The Athenæum had now on hand accumulated proceeds of its bequest (Spencer) fund, amounting to nearly twenty thousand (20,000) dollars. Its librarian was authorized to go abroad for the purpose of the joint purchase. His direct purchases abroad amounted to some 8,000 volumes. Miscellaneous American and foreign purchases during the subsequent year aggregated 9,000 volumes; so that the 13,000 volumes forming the old library of the Athenæum and the nucleus of the new joint library was at the time of opening the latter (December 16, 1889), augmented to 30,000 volumes. A collection also, by reason of the peculiarly favorable conditions of its formation, of an unusually valuable character: having as its basis a library of slow and careful growth (the accessions of 25 years) and for its enlargement a union of two purchasing funds, one designed especially for standard reference material—the other naturally devoted to more popular classes of literature.

The standard sets being purchased abroad at second-hand were in many cases secured at prices far below their American market value. The thirty thousand dollars (30,000) expended thus yielded an unusually rich return. During the winter and spring of 1888-9 the new books were received and catalogued, a house being rented for the purpose.

On July 1, 1889, the old Athenæum was closed and the two collections removed to the basement of the new building. About 2,500 volumes of the old library were re-bound at the expense of the city. About 1,000 volumes, too far worn for binding, were distributed by the Athenæum among the four chief hospitals of the city, the poor farm, and the home for children and aged women. Four hundred and ninety volumes, while being bound, were destroyed in the Tribune fire of November 28, 1889. The balance finally turned over amounted to 12,107 volumes.

The new purchases of the Athenæum up to December 16, 1889, amounted to 8,825 volumes; of the city board during the same period 8,906 volumes, making the exact total in the library, when thrown open, 29,838 volumes.

The books of the two collections, city and Athenæum, are distinguished by separate marks of ownership; besides being kept carefully distinct in the administrative records. They are, however, classified together on the shelves and catalogued together, so that they form to the public in effect but one library. A complete card catalogue classified after the same manner as the books on the shelves (in about 175 popular divisions) and in effect a miniature of the shelves was ready for use at the time of opening.

As soon as possible this will be supplanted by a larger and fuller class, title and subject card catalogue, the present cards being rearranged to form a pure author catalogue. A complete printed finding list will be ready sometime in February to be sold at fifteen cents a copy.

At present the only printed catalogues are the prose fiction and juvenile (five cents) and the foreign literature sold at three cents. In addition there has been printed the system of classification in use, with explanation and a very full subject index. Only 1,000 copies of this were struck off, and the plates were destroyed in the Tribune fire.

The Hennepin County Medical Society and the Minneapolis Dental Society have turned over to the public library the collection of books and pamphlets that had formed the libraries of these societies. Various members of the medical and dental professions of this city have in addition contributed the sum of \$335.30 to be expended in medical serials for the coming year. The interest thus indicated has led the board to assign a special series of alcoves to the uses of a medical reading room.

The board has also to acknowledge with gratitude, gifts of books and pamphlets from the following individuals: Dr. Burnside Foster, E. S. Corser, G. A. Edwards, Wm. Cheney, W. A. Mitchell, Dr. W. E. Leonard, Dr. C. H. Hunter, Dr. E. J. Brown, Dr. C. M. Bailey, H. T. Welles, W. H. Dunwoody, B. A. Mason, L. Findorff, of Minneapolis. Also from various departments of the United States government, the Michigan State Library and various institutions of learning throughout the United States.

The other institutions, besides the Athenæum having quarters in the library building, are the Minnesota Academy of Natural Sciences and the Minneapolis Society of Fine Arts. Both of these are permitted to occupy rooms during the pleasure of the board.

The former has placed its entire natural history collection in the building free of access to the public. The latter has transferred its art school under the directorship of Mr. Douglas Volk, to the rooms assigned it on the third floor, and the work of the school is now in regular operation there. A free night class has been undertaken by the society, which on the first evening opened with the extraordinary attendance of one hundred.

Some eight societies have already applied for, and been granted permission to hold their meetings in the meeting room of the building. They are societies existing for purposes of literary, artistic or scientific culture, including three medical associations.

By a resolution of the board it was determined that "no denominational or political organizations shall be permitted to hold meetings in the building and no society occupying rooms in the building shall discuss religious questions in a sectarian spirit or political questions in a partisan spirit."

By the courtesy of the exposition board and permission of the United States customs department a large part of the casts owned by the exposition were loaned to the library board in December, to remain for the period of four months, with privilege of purchase at the end of that time.

Before the opening of the building the library board received a gift of extraordinary interest and value in the shape of six oil paintings, donated by J. J. Hill, Esq., of St. Paul. They are as follows: "The Storming of Tel el Kebir," by A. de Neuville; "Fishing Lesson," by Alf Guillon; "Forest of St. Germain," by A. Jacomin; "Market Morning—Constantinople," by A. Pasini; "Gate of Justice—Granada," by Prof. A. Wagner; "Japanese," by G. Courtois.

By the terms of the gift, as cordial and gracious, as the gift was thoughtful and generous, it was provided that should the art department ever be abolished the paintings might be sold for the use and benefit of the library. These paintings with some hundred others secured as loans through the efforts of the Society of Fine Arts, form the collection with which the art gallery was thrown open, and the bulk of which will remain within it for some months to come. The interest and value of the art department is also enhanced by a collection of pottery, porcelain and miscellaneous objects of fine art workmanship courteously and generously loaned by individual residents of Minneapolis. Among the striking objects of this collection stands now also a suit of Maltese armor presented to the library board by the Hon. C. M. Loring.

A feature, also properly of the art department, as well as a necessary

adjunct of the external architecture of the building, will be the colossal bronze figure of History which the board has ordered of Mr. Jacob Fjelde—a Minneapolis sculptor. It is to occupy the niche over the main entrance; and within a few weeks will be in place.

On the day following the opening, applications for library cards began to be received; on the 19th, books began to be issued. Up to January 31, a period of less than six weeks, 5,161 applications had been filed and 4,227 cards issued, and 13,902 volumes had been circulated. On one day, the circulation for home use reached 885 volumes. This, in spite of a holiday season, in spite of the comparative smallness of the library and in spite of the fact that the only printed catalogue available covered only two departments, and also in spite of the very extensive use of the periodical reading rooms and the reference department within the building—has hardly a parallel in library experience. The attendance at the art gallery and museum has averaged hundreds daily. These departments were for a fortnight kept open the same hours as the library. They are now open from 1:30 to 6 and 7:30 to 10 p. m. The library is open every day in the year: on ordinary days from 8:30 a. m. to 10 p. m.; on Sundays and holidays for reference use from 2 until 10 p. m. As slight restriction as possible is interposed in its use. All persons are free to use it within the building. All residents of Minneapolis above the age of 14 years are entitled to draw books for home use without charge. The only preliminary is the filing of a guaranty, blanks for which are furnished by the library, signed by some responsible person resident in the city, and not of the family of the applicant. The card issued upon this guaranty is good for a period of two years. To guard against the spread of infectious disease through the use of the library, the rules demand that cases of such disease in the households of borrowers shall be immediately reported to the library; and that no more books shall be issued to such household until six weeks after the removal of the quarantine sign. The board of health has declared an attempt to draw books within such period a misdemeanor.

By a resolution of October 30, 1889, the board of education tendered to the library board rooms in the North Side High School building for use as a branch library and reading room. By a resolution of January 11, 1890, the library board voted to accept this offer, and to establish the branch, both as a reading room and delivery station, as soon as the rooms should be made ready. The board likewise declared its readiness to establish similar branches on the East side and South side, whenever similar facilities should be offered.

At the regular city election of 1886, Messrs. Thomas Lowry and J. B. Atwater were re-elected members of this board for the regular term of six years; at the election of 1888, Messrs. T. B. Walker and Sven Oftedal were similarly re-elected. The officers of the board have continued as at first chosen, viz.: T. B. Walker, president; E. M. Johnson, secretary. In November, 1890, the office of librarian was established and Herbert Putnam, the librarian of the Athenæum, who had already served a year as acting librarian of the board, was elected to fill it.

A Statement of the Receipts of the Library Board from its Creation to December 10, 1889.

Received from the sale of city bonds.....		\$101,800.00
taxes in 1886.....	\$21,678.89	
taxes in 1887.....	47,802.43	
taxes in 1888.....	51,823.65	
taxes in 1889.....	38,023.66	
individual subscriptions.....		150,418.63
incidental sources.....		45,260.00
		572.75
Total receipts.....		\$307,051.38

A Statement of Disbursements of the Library Board from its Creation to December 10, 1889.

Paid for building site.....	\$63,867.89
Paid account building.....	220,180.68
incidentals.....	1,780.67
books.....	10,094.42
supplies.....	1,721.64
insurance.....	268.27
fuel.....	198.50
salaries in library.....	4,256.42
janitor.....	298.50
furniture.....	27.00
binding.....	759.52
light.....	22.58
	\$303,476.39
Cash on hand.....	3,574.99
	\$307,051.38

A Statement Showing the Cost of the Library Building (Completed) in Detail, Including the Cost of the Ground Upon Which it Stands.

Cost of land.....	\$63,867.89
foundation and excavation.....	5,853.00
iron beams.....	11,994.95
fire-proofing.....	10,950.00
cut stone in place.....	61,000.00
brick and carpenter work.....	68,250.00
mill work.....	14,750.00
heating apparatus.....	12,075.00
covering heating apparatus.....	135.64
stair ironwork.....	10,200.00
heat-controlling apparatus.....	2,200.00
electric wiring.....	760.10
plumbing.....	2,385.00
plastering.....	2,925.00
architects and plans.....	6,900.00
book stacks.....	14,900.00
elevator.....	1,900.00
lighting fixtures.....	3,000.00
Fjelde statue.....	3,500.00
sidewalk and curbing.....	2,618.35
grading lot.....	279.54
tinting walls.....	725.00
gas-piping.....	49.20
superintendence of construction.....	2,825.00
furniture and miscellaneous.....	20,850.00
Cost of building complete.....	\$324,893.57

A list of the subscribers to the Library Building Fund, showing amounts subscribed by each:

The Athenæum.....	\$8,000	J. E. Bell.....	500
T. B. Walker.....	5,000	E. Moore.....	400
C. A. Pillsbury & Co.....	5,000	L. F. Menage.....	250
Thomas Lowry.....	5,000	T. B. Casey.....	250
W. D. Washburn.....	5,000	G. H. Christian.....	250
Clinton Morrison.....	5,000	E. M. Johnson.....	250
C. G. Goodrich.....	5,000	John Atwater.....	250
W. S. King.....	5,000	R. C. Benton.....	100
J. Dean.....	5,000	J. E. Badger.....	100
Long & Kees.....	3,000	J. W. Griffin.....	100
R. B. Langdon.....	2,000	J. Peterson.....	50
S. C. Gale.....	1,000	S. R. Hall.....	50
W. H. Dunwoody.....	500	C. C. Jones.....	50
Chas. Martin.....	500	H. Paige.....	25
M. B. Koon.....	500	E. D. Brown.....	20
F. Peavey.....	500	F. G. Corser.....	10
G. H. Rust.....	500	A. R. Graves.....	10
S. P. Snider.....	500		
W. H. Eustis.....	500	Total subscribed.....	\$61,665
S. Hill.....	500	Total paid up.....	45,260
Wright Estate.....	500		
Hamlin Estate.....	500	Total unpaid.....	\$16,405

AN ACT

To Amend the Charter of the City of Minneapolis.

Be it Enacted by the Legislature of the State of Minnesota:

SECTION 1. An act entitled "an act to amend and consolidate the charter of the city of Minneapolis," approved March 8, 1881, is hereby amended by adding to the end of such act the following: Chapter 12, section 1, there is hereby created and established in and for the city of Minneapolis a board which shall be styled the "library board of the city of Minneapolis," said board shall have power to establish and maintain in the city of Minneapolis public libraries and reading rooms, galleries of art and museums for the use and benefit of the inhabitants of said city, and for the purpose of so doing it shall have the following powers, that is to say: It may adopt a common seal and be capable of suing and being sued, and of taking by gift, grant, purchase, devise, bequest or otherwise any real or personal property and of using selling, controlling, conveying and engaging the same and of entering into, making, performing and enforcing contracts. It may make and publish from time to time by-laws for its own guidance, rules and regulations for the government of its agents, servants and employees, and for the government and regulation of the libraries and other collections under its control. It may hire or erect and maintain as it shall deem best, buildings suitable for the purpose contemplated by this act, but it shall never erect any building upon land to which it has not the title in fee simple. It may appoint all necessary agents and employees, fix their compensation, and may remove such appointees. It shall have the expenditure of all moneys collected by taxation or otherwise and placed to the credit of the library fund, and shall, in addition to the herein enumerated powers, have full powers and authority to undertake and perform every act necessary or proper to carry out the spirit and intent of this act.

SEC. 2. Said library board shall consist of the mayor of the city of Minneapolis, the president of the board of education of the city of Minneapolis, the president of the university of the State of Minnesota, who shall respectively be members *ex officio* thereof, and six other members who shall be elected from time to time, as herein provided, by the legal voters of the city of Minneapolis, and who shall be resident and qualified electors of said city.

At the annual city election to be holden on the first Tuesday of April, 1886, there shall be elected two library directors for the term of six years, and thereafter there shall every second year be elected two library directors for the term of six years from the third Tuesday in April after their election. In case any library director shall die, resign, remove from the district or otherwise vacate his office more than one year before the expiration of his term of office, a library director may be chosen at the annual election after such vacancy shall occur, to fill the place for the unexpired term of the director so vacating.

SEC. 3. All elections for library directors shall be at the annual city election, and as a part of such city election, and such library directors shall be voted for upon a separate ballot, and a separate ballot-box shall be provided at each precinct, which shall be kept by the judges to receive the ballots of such persons as are entitled to vote for such library directors. The judges of election shall make returns of the votes cast for library directors, and the city council shall canvass the same as in the case of city officers. The city clerk shall forthwith notify the persons elected of their election, and in all matters not herein specially provided for, touching such election, the rules provided for the election of city officers of said city shall apply.

SEC. 4. Every library director, before he shall enter upon the duties of his office, shall take, subscribe and file in the office of the city clerk of said city, an oath or affirmation that he will support the constitution and laws of the state of Minnesota, and discharge the duties of his office to the best of his ability. The officers of the library board of the city of Minneapolis shall consist of a president and secretary, who shall be library directors. The city treasurer shall be treasurer of the board and the comptroller shall perform such duties in connection therewith as are hereinafter prescribed. The secretary of the board and the city treasurer of the city of Minneapolis shall each, before entering upon the duties of his office, execute and deliver to the library board of the city of Minneapolis a good and sufficient bond, payable to the library board of the city of Minneapolis, in such sums as shall be fixed upon by the board, and with sureties who shall be freeholders of said city and shall be approved by the board, and who shall justify in the aggregate to double the amount of the bond, conditioned that the principal in the bond shall well and faithfully perform and discharge all the duties of his office and pay and turn over to his successor or to whomsoever the board may direct, all moneys and every valuable thing which shall come into his hands by virtue of his office belonging to said board. Such bonds shall be filed for safe keeping with the city comptroller of the city of Minneapolis.

SEC. 5. The president, or in his absence a president pro tempore, shall preside at all the meetings of the board and sign all orders on the treasurer for all moneys voted to be paid, and shall perform all duties necessary for the transaction of the business of the board, and which are usually performed by the president of a corporation. The secretary, or in his absence the secretary pro tempore, shall keep a full and fair record of all the proceedings of the board at its meetings, and shall draw and attest all orders drawn upon the treasurer, and keep a record thereof showing the date, numbers, amount, purpose for which drawn, and names of payee of each order separately. All such orders shall be made payable to the order of the payee therein named, and shall not be paid without his indorsement, either personally or by his authorized agent or attorney. The secretary shall perform such other duties as are usually performed by such officer or as may be directed by the board, and shall draw no order on the treasurer except such as have been allowed by the board by a majority vote of all its members taken by ayes and nays and entered on the record of the proceedings of the board. The city comptroller shall keep the regular books of account of the board, in which he shall enter all indebtedness of such board and which shall at all times show the precise financial condition of said board, the amount of bonds, orders, or other evidences of indebtedness outstanding and the redemption of the same when redeemed, and he shall countersign all bonds, orders or other evidences of said

board, and keep an exact account thereof, showing to whom and for what purpose issued and the amount of each, and all moneys received or paid out by the city treasurer on account of said board. All claims allowed by the board shall be audited by the city comptroller. The city treasurer shall receive and safely keep all moneys of the board and pay the same only upon orders signed by the president and attested by the secretary of the board and countersigned by the comptroller and endorsed by the payee, and shall keep full books, records and vouchers of all his transactions. He shall deposit the moneys of said board as the moneys of the city of Minneapolis in any banks which shall be designated by the city council of said city as depositories of funds of said city, and the funds, while on deposit in such banks, shall, for all purposes connected with such deposit, be regarded as the money of the city of Minneapolis, and may be recovered as such by said city from said banks and the sureties of such banks, upon the bonds which said banks shall execute to the said city, but when drawn or recovered from such banks shall be accounted for to its proper fund. And the treasurer shall have the same exemption respecting such funds deposited in such banks as in respect to other funds of said city. The secretary of the board is hereby forbidden from signing or issuing any orders upon the treasurer of said board, except when there is money in the hands of the treasurer to pay the same. The said board shall never issue any bond or promissory note, certificates of indebtedness or other obligation, for the payment of money, except that the same shall be made to come due at a date not later than the first day of July the next ensuing, and then for no greater sum than can be paid, when due, out of the regular revenues of the board for the year in which such bond, note, certificate of indebtedness, or of other obligation indebtedness is issued.

SEC. 6. Said library board is hereby authorized and empowered to levy upon the taxable property of said city in each and every year such taxes as will raise sufficient sums of money as will be required during the succeeding year for the establishment, maintenance and government of the libraries and collections contemplated by this act, and for the payment of all other expenses properly incidental to the same, provided that the aggregate annual levy of such taxes shall never exceed in any one year one-half of 1 mill on the dollar upon the assessed valuation of said district. The board shall make a return of its annual levy of taxes on or before the first day of November of every year to the county auditor of the county of Hennepin and such taxes shall be collected and the payment thereof enforced with and in like manner as state and county taxes are collected and the payment thereof enforced, and when collected, together with all costs, interest and penalties collected thereon, be paid over by the county treasurer to the city treasurer of the city of Minneapolis as often as said county treasurer is required to make settlement with the city treasurer in respect to city taxes. Provided, however, that if for any reason said board shall in any year fail to make return of its annual levy of taxes to the county auditor by the time herein specified, that in such cases the rate of taxation determined and fixed by the board of tax levy of Hennepin county as the maximum rate which said library board shall levy for such year, shall be taken to be the rate of taxation determined upon by said library board for such year, and the county auditor shall govern himself accordingly; and any taxes which shall hereafter be extended upon the tax list of Hennepin county by the county auditor of said county based upon the action of the board of tax levy, said library board having for any reason failed to make a return as herein provided, shall be and remain legal and valid.

SEC. 7. Said library board may purchase real estate for the purposes contemplated by this act whenever six library directors shall vote to make such purchase, and the board may also sell and convey any of its real estate, but only when five of the library directors shall vote to make such a sale. In the case of sale of real estate by the board, the deed of conveyance thereof may be executed by the president and secretary officially, having the seal of the board affixed thereto. All votes under this section shall be by yeas and nays, and recorded in the record of the proceedings of the board. Any person desiring to make donations of money, personal property, or real estate for any of the purposes herein contemplated shall have the right to vest the title to the money, property or real estate so donated in the board of directors created under this act, to be held and controlled by such board when accepted, according to the terms of the deed, gift, devise or bequest of such property, and as to such property, the board shall be held and considered to be special trustees.

SEC. 8. The annual meeting of the board for the election of its officers for the year shall always be on the third Tuesday of April at such hour and place as the board may, by its rules appoint for its regular meetings. But vacancies may be filled whenever they shall happen during the year, and officers shall hold until their successors are elected and qualified, unless they cease to be eligible. The regular meetings of the board shall be fixed by its rules and by-laws. Special meetings may be called by the president or any two library directors by written notice, stating the time, place and object of the meeting, to be served personally or by mail at least twenty-four hours before such meeting. But whenever a majority of all the directors are present at any meeting the same shall be a legal meeting at which any business which could come before a regular meeting, may be transacted, irrespective of whether any legal notice was given for such meeting or not.

SEC. 9. Said library board may enter into association with any independent society or other organization owning libraries or museums, or existing for purposes kindred to those contemplated in this act, upon such terms and conditions as shall best promote the object for which said board is created.

SEC. 10. All libraries and museums established under this act, and so far as consistent with the preceding section, all collections in any manner under the charge of the library board herein established, shall be forever free to the inhabitants of the city of Minneapolis, always subject, however, to such reasonable rules and regulations as shall be necessary for their effective administration.

SEC. 11. That Thomas Lowry, M. B. Koon, John B. Atwater, Sven Oftedal, T. B. Walker, E. M. Johnson, together with the mayor of the city, ex-officio, the president of the board of education of the city, ex-officio, the president of the university of the state of Minnesota, ex-officio, are hereby appointed and constituted the first directors of the library board of the city of Minneapolis, and the six first above named shall be the elective members of said board, and shall hold office, two for one year, two for three years, and two for five years from the third Tuesday in April next following the passage of this act;

and at their first regular meeting shall cast lots for such respective terms. The library board herein appointed shall meet at the office of the city clerk of the city of Minneapolis, on Saturday the 21st day of March, 1885, or so soon thereafter as practicable, and may then and there effect a temporary organization and attend to the transaction of any business.

SEC. 12. This act shall take effect and be in force from and after its passage.
Approved the 2d day of March, 1885.

THE LIBRARY BOARD OF THE CITY OF MINNEAPOLIS WITH THE MINNEAPOLIS ATHENÆUM—
CONTRACT.

Whereas, The library board of the city of Minneapolis is about to erect a library building in the city of Minneapolis in accordance with the provisions of the act of the legislature of the state of Minnesota creating said library board, (which said act was approved March 2, A. D. 1885), and for the purpose in said act prescribed, and

Whereas, The said library board is desirous of furnishing the people of Minneapolis with a public library as soon as practicable, and

Whereas, The Minneapolis Athenæum, a corporation duly organized and created under the laws of the state of Minnesota, owns a large and valuable miscellaneous library, and

Whereas, The building now occupied by the said Minneapolis Athenæum is too small for the convenient arrangement and management of said library and therefore the said library is not accomplishing in the community all that the members of the said Athenæum desire it to do, and

Whereas, The funds and resources of the said Minneapolis Athenæum are not sufficient to provide suitable room and accommodations for the said library;

Now therefore, this contract, made this first day of September, A. D. 1885, between the said "The Minneapolis Athenæum," a corporation, party of the first part, and the said "library board of the city of Minneapolis," party of the second part, witnesseth that the said parties hereto, in consideration of the mutual promises and engagements hereinafter contained, and in consideration of the sum of one dollar paid by each to the other, the receipt whereof is hereby acknowledged, do mutually covenant and agree together as follows, to-wit:

First. That upon the completion of a suitable library building, to be erected by said second party in said city of Minneapolis (which said building is to be erected and made ready for occupancy as soon as practicable), the said first party will remove thereto its entire library, including all books, pamphlets, periodicals, maps, charts, and all its library property of every name and nature, and that said library shall remain in said building and under the general care and supervision of said second party during the continuance of this contract, and that during said time all books, periodicals and other library property which may be acquired by the said Minneapolis Athenæum by purchase or otherwise, shall remain and be kept in the said library building and under the general management of the said library board of the city of Minneapolis.

Second. That the said library shall be forever free to the inhabitants of the city of Minneapolis, always subject, however, to such reasonable rules and regulations as shall be necessary for its effective administration.

Third. That the said first party will subscribe and pay to the building fund of the said second party the sum of eight thousand dollars (\$8,000), which said sum is to apply on the general subscription contemplated in section 3 of the act approved February 28, A. D. 1885, authorizing the city of Minneapolis to issue bonds for the benefit of the said library board.

Fourth. That upon the completion of said library building the said second party will at all times during the continuance of this contract provide and furnish therein, for the said first party, sufficient room or rooms, well lighted and heated, and furnished with shelves and all other appurtenances for the ample and convenient arrangement and use of the aforesaid library of first party, and that said second party will also provide and furnish for the use of said first party, a suitable room in said building for the purpose of holding the meetings of the shareholders of the said Minneapolis Athenæum, and of the board of directors and of the other officers thereof, and that the above mentioned room or rooms, and all the privileges of said building herein granted to said first party, shall be provided by said second party without any charge for the rent and use thereof, and that the said first party shall at no time be put to any charge or expense for the furnishing, lighting, heating, ventilation or repairs of said library building nor any part thereof.

Fifth. That the board of directors of the said Minneapolis Athenæum shall have the right to appoint, subject to the approval of the said second party, one assistant librarian, who shall have especial supervision and care of the said property of the Minneapolis Athenæum, and that the duties of the said assistant librarian in his relation to the said Minneapolis Athenæum shall be such as the board of directors of the said Athenæum shall prescribe.

Sixth. That the party of the first part herein shall retain its title to and property in all the books and other library property which may be placed in charge of the said library board, by virtue of this contract or otherwise. That all said books shall be kept apart and separate from the books and property of the said library board, and from any other books whatsoever. That the books of the Minneapolis Athenæum shall be plainly and distinctly marked in such manner as to distinguish them from all other books under the control of said library board. That the said books of the Minneapolis Athenæum shall be kept in good repair, shall be rebound when necessary, when books are lost they shall be replaced; and whatever periodicals, magazines, and unbound publications the Minneapolis Athenæum may have on hand or may hereafter acquire, shall be bound in some convenient form, and that reasonable care shall be taken of all the property of the Minneapolis Athenæum, which shall be placed in charge of the library board. And that

during the continuance of this contract the said library board shall keep the said property of the Minneapolis Athenæum continually insured against loss by fire, in good and reliable companies, in the name and for the benefit of the said first party in such sum as said first party or the board of directors thereof may determine, not exceeding the actual cash value of the said property.

Seventh. That the said party of the second part will bear all the expense of carrying out this contract; that it, the said second party, will pay:

1. For removing the said library to the building above mentioned.

2. The expense of marking and cataloguing the same.

3. The salary of the assistant librarian provided for in this agreement.

4. All expense incurred in carrying out the provisions of paragraph six herein, to-wit: Keeping said library in repair, rebinding and caring for books, replacing lost books, binding periodicals, magazines, and unbound publications, all premiums for insuring said property, and, in short, that it, the said second party, will pay all necessary and reasonable expense incurred in the proper care and management of the library of said party of the first part.

Eighth. That this contract shall take effect and be in force when it shall have been ratified and adopted by the said library board of the city of Minneapolis and by the said Minneapolis Athenæum, and shall continue and be in force for the period of ninety-nine years from the date of its said ratification.

ANNUAL REPORT

OF THE

BOARD OF EDUCATION,

Of the City of Minneapolis.

BOARD OF EDUCATION FOR 1889.

MEMBERS.

W. D. HALE, term expires January 1, 1891.
B. F. NELSON, term expires January 1, 1891.
JOHN G. MOORE, term expires January 1, 1891.
A. C. AUSTIN, term expires January 1, 1893.
ROBERT PRATT, term expires January 1, 1893.
M. FALK GJERTSEN, term expires January 1, 1895.
A. T. ANKENY, term expires January 1, 1895.

OFFICERS OF THE BOARD FOR 1889.

A. C. AUSTIN,	-	-	-	-	President.
M. FALK GJERTSEN,	-	-	-	-	Secretary.
E. H. MOULTON,	-	-	-	-	Treasurer.
W. S. PEARSON,	-	-	-	-	Clerk.
W. S. PARDEE,	-	Superintendent of buildings.			
JOHN E. BRADLEY,	Ph. D., Supt. of Schools.				

STANDING COMMITTEES OF THE BOARD FOR 1889.

Committee on Rules and Regulations—Messrs. Gjertsen, Ankeny and Moore.

Committee on Finance, Claims and Insurance—Messrs. Hale, Nelson and Ankeny.

Committee on Buildings and Repairs—Messrs. Nelson, Pratt and Hale.

Committee on Teachers, Janitors and Salaries—Messrs. Ankeny, Hale and Gjertsen.

Committee on Fuel, Supplies and Printing—Messrs. Moore, Gjertsen and Pratt.

Committee on Text Books, Course of Study and Library—Messrs. Pratt, Nelson and Moore.

The President is ex-officio a member of all standing committees.

ANNUAL REPORT

OF THE

BOARD OF EDUCATION,

MINNEAPOLIS, MINN.

To the Honorable City Council of the City of Minneapolis, Minn.

Gentlemen—In submitting to your honorable body, at this time a concise statement of the condition of the board of education, I labor under this disadvantage: the school and fiscal year of the board of education ends June 30th: and our compilations are of necessity, therefore, incomplete. The attendance of pupils for the year, for instance, will be at least 2,000 greater than now shown, the great influx of new scholars occurring in the spring.

With this explanation I submit the following statistics, leaving to the annual report of the board of education, to be issued next July, the complete and detailed narrative of the work of this department.

Running expenses.....	\$444,895.43
Permanent improvements.....	203,971.60
Total expense.....	\$648,867.03
Cash value of lands.....	958,400.00
Cash value of buildings.....	1,120,900.00
Total value of real estate.....	\$2,099,300.00
Number of school buildings (including two rented).....	46
Number of school buildings erected during the present year.....	5
Number of additions erected during the present year.....	2
Number of school rooms.....	483
Number of recitation rooms.....	235
Number of teachers employed (day schools).....	498
Number of teachers employed (evening schools).....	49
Number of sittings for pupils.....	20,538
Number of pupils enrolled (September to January) day schools only..	18,360
Number of pupils enrolled for year ending June 30, 1889.....	19,496

The work of the board of education has been unusually satisfactory during the past year, and the progress of the schools has kept pace with the steady growth of the city. Each year sittings for 1,500 to 2,000 new pupils must be provided, and the resources and energy of the board are taxed to meet the constant demand. The past year accommodations for 3,792 new pupils were provided by the erection of seven new buildings and additions, but several of the schools are still crowded, and obliged to operate on double sessions. A feature of our building operations the past year has been the low cost, notwithstanding a marked improvement in all essential advantages of construction. Special pains have been taken with the light, ventilation and other sanitary arrangements, and we now construct, at very low cost, a well arranged and thoroughly modern school building. Of late all buildings have been built by contract, the contract price covering the building, complete except furniture.

Care in the selection of janitors and in purchasing of fuel, combined with improvements in apparatus, is resulting in a gratifying economy in the cost of heating the school buildings. The furnaces in the older buildings are gradually being replaced by steam plants, resulting in a greater efficiency at a less cost.

In the curriculum of the schools, no decided changes have been made the past year although there has been gradual and general improvement.

Manual training and sewing are being extended into the lower grades as fast as practicable, and good results are sure to follow. The high schools, especially the branch schools are showing a vigorous growth.

The evening schools of this city are a feature not to be overlooked. Last year instruction in the common English branches was given during the four winter months to 2,545 scholars unable to attend day schools. This year, although the number has not been so great, the per cent. of attendance and general interest has been greater, and the success and efficiency of these schools is settled beyond reasonable doubt. By means of these schools, our large foreign population is more readily assimilated, and being taught the language and history of our country, make more ambitious, industrious and intelligent citizens. These are the common schools of the common people, where those cut off from the day schools by reason of poverty, age or misfortune can acquire the rudiments of an education which will raise them above the level of the ignorant and unambitious.

A general financial statement will be found in your comptroller's report, and a list of the real estate under the head of city property.

Respectfully,

M. FALK GJERTSEN,
Secretary.

ANNUAL REPORT

OF THE

BOARD OF PARK COMMISSIONERS,

Of the City of Minneapolis.

PARK BOARD OFFICIALS.

CHARLES M. LORING,	-	-	-	President.
ANDREW C. HAUGAN,	-	-	-	Vice President.
WALLACE G. NYE,	-	-	-	Secretary.
CHELSEA J. ROCKWOOD,	-	-	-	Attorney.
WM. M. BERRY,	-	-	-	Superintendent.
FRANK H. NUTTER,	-	-	-	Engineer.

PARK COMMISSIONERS—1889.

EDWARD C. BABB, Mayor, Ex-officio.
ALBERT E. ALLEN, 1893.
ALBERT J. BOARDMAN, 1893.
EMERSON COLE, Ex-officio.
THOMAS DOWNS, Ex-officio.
ZEPHERIEN DEMEULES, 1893.
WILLIAM W. FOLWELL, 1895.
ANDREW C. HAUGAN, 1895.
JOSEPH INGENHUTT, 1891.
CHARLES M. LORING, 1891.
SAMUEL A. MARCH, 1891.
ABIEL H. MITCHELL, 1891.
JESSE E. NORTHUP, 1895.
*JOHN C. OSWALD, 1893.
J. ARTHUR RIDGWAY, 1895.

*John C. Oswald resigned and E. M. Wilson elected to fill the unexpired term.

ANNUAL REPORT
OF THE
BOARD OF PARK COMMISSIONERS,
MINNEAPOLIS, MINN.

To the Honorable City Council:

GENTLEMEN—The year 1889 has been a busy one in the department of parks. A greater area of land has been acquired, and more extensive improvements have been made than in any previous year in the history of the board. The most important acquisition is Minnehaha Park, consisting of 123 acres surrounding the famed Minnehaha Falls, the title to which, having been secured by the State of Minnesota under condemnation proceedings inaugurated by act of the legislature of 1885, was vested in the city of Minneapolis upon payment by this board of \$92,283.16 to the State.

The plan of connecting the series of lake shore drives with Minnehaha Park by a parkway along the valley of Minnehaha creek from the shore of Lake Harriet was given a decided impetus early in the season by the generous gift of about 40 acres of the valley, varying in width from 200 to 600 feet, and extending from the junction of Humboldt avenue and Fiftieth street to Lyndale avenue. The board by purchase has also acquired title to a strip of land 200 feet in width from Lake Harriet along Humboldt avenue to the Butler and Fogg tract.

Another acquisition, the importance of which will be more generally recognized in the immediate future than at the present time, is Saratoga Park, a tract of 64 acres lying about three miles west from the centre of the city and extending from Western avenue to Superior avenue. The cost of this tract, including interest on deferred payments, was \$100,000, which amount the vendors accepted in certificates of indebtedness, payable in ten annual payments, and the whole cost being assessed upon benefitted property payable in ten annual payments, said certificates will be paid from the funds so derived.

Proceedings in condemnation were instituted during the year for the acquisition of 38½ acres, known as Powderhorn Park, located in the 7th ward, and a tract of 9 acres in the 3d ward, known as Todd's Pond. Appeals from the appraisal were taken in both matters, which appeals are yet undetermined.

Two small parks, comprising about six acres, and located in Oak Park addition, were given to the city by E. S. Corser, *et al.* owners of the addition.

The boating privileges at Lake Harriet and Central Park lake were operated during the year by the board, and netted nearly \$3,000.

The parks have been maintained during the year and given thorough police protection and the driveways have been sprinkled and kept in good condition at a cost of \$25,592.75.

The improvements are as follows: Kenwood Boulevard was completed. Its entire length, from Central Park to Lake of the Isles, being 1.68 miles.

Lake Harriet was further beautified by the construction of two additional drives, one on the west and one on the south shore, and the drive along the west bank was widened and systematically planted with trees and shrubbery.

Two drives were constructed along the Minnehaha Parkway from Lake Harriet to Lyndale avenue.

At Lake of the Isles the dredge has been kept in operation, and the material excavated from the lake was deposited along the marshy borders.

The observatory at Prospect Park was completed in conformity with the original plans.

At Minnehaha park the work was directed to the clearing up of the whole area and the beautifying of that portion in the immediate vicinity of the falls, stairs were constructed leading into the glen.

An office building was constructed in Central park for the superintendent and the lake within Elliot park was cleared and a fountain placed therein.

Barnes park and Portland park were completed and Oak Lake park was improved by seeding and planting.

Upon request of property owners trees were planted on Dupont, Queen and Sheridan avenues north, the cost of the trees, planting and care for three years being assessed upon the abutting property.

Additional work was done in the direction of boulevarding Lyndale avenue north, the road bed was brought to grade and the trees previously planted were cared for. The cost of completing this improvement was assessed upon abutting property and as this revenue is derived the board will continue the work.

Respectfully submitted,

WALLACE G. NYE,
Secretary Board of Park Commissioners.

ANNUAL REPORT
OF THE SECRETARY
OF THE
BOARD OF COURT HOUSE, AND CITY
HALL COMMISSIONERS,
Minneapolis, Minn.

THE BOARD OF COURT HOUSE AND CITY HALL COMMISSIONERS.

WM. D. WASHBURN,	JNO. DELAITTRE,
JOHN. C. OSWALD,	WM. S. CHOWEN,
OLIVER T. ERICKSON,	LARS SWENSON,
DAVID M. CLOUGH,	GEORGE A. BRACKETT,
TITUS MARECK,	EDGAR F. COMSTOCK,
JOHN SWIFT,	EDWARD M. JOHNSON.

OFFICERS OF THE BOARD FOR 1890.

DAVID M. CLOUGH,	- - -	President.
EDWARD M. JOHNSON,	- - -	Vice President.
LARS SWENSON,	- - -	Treasurer.
CHAS. P. PRESTON,	- - -	Secretary.
LONG & KEES,	- - -	Architects.
(Offices, Kasota block.)		
O. T. ERICKSON,	- - -	Clerk of the Works.
(Office at the building.)		
DANIEL FISH,	- - -	Attorney.
(Offices, Oneida block.)		

CONSTRUCTION COMMITTEE.

JOHN DELAITTRE,	E. F. COMSTOCK,
O. T. ERICKSON,	JOHN SWIFT,
E. M. JOHNSON,	GEORGE A. BRACKETT.

FINANCE COMMITTEE.

E. M. JOHNSON,	W. S. CHOWEN,
TITUS MARECK,	E. F. COMSTOCK.

AUDITING COMMITTEE.

TITUS MARECK,	O. T. ERICKSON,
GEORGE A. BRACKETT.	

ANNUAL REPORT

OF THE

BOARD OF COURT HOUSE AND CITY HALL COMMISSIONERS,

MINNEAPOLIS, MINN., December 31, 1889.

To the Board of Court House and City Hall Commissioners:

GENTLEMEN—I have the honor to submit herewith my report for the fiscal year ending December 31, 1889.

Respectfully,
CHAS. P. PRESTON, *Secretary.*

RECEIPTS AND EXPENDITURES FOR THE YEAR 1889.

Receipts.

FROM SALE OF "CITY SERIES" BONDS—		
Par value.....	\$200,000.00	
Premiums	18,537.00	
Accrued interest.....	6,032.00	
	<hr/>	\$224,569.00
From sale of side-walk and curb-stone.....		150.00
From advertising privileges on fence.....		200.00
		<hr/>
Total receipts.....		\$224,919.00
Balance in treasury December 31, 1888.....		25,832.57
		<hr/>
Total to be accounted for.....		\$250,751.57

Expenditures.

TOWER FOUNDATION ACCOUNT—		
Paid Ring & Tobin, contract in full.....		\$10,630.63
RUBBLE AND FOOTING STONE ACCOUNT—		
Paid trustees F. Cook estate on account.....		13,201.00
SUB-BASEMENT WORK ACCOUNT—		
Paid Bengt Aronson on account contract.....		88,283.31
IRON WORK ACCOUNT—		
Paid Crown Iron Works Co. on account contract.....		14,528.36
GRANITE, CUT STONE AND BRICK WORK ACCOUNT—		
Paid Haglin & Morse on account contract.....		24,111.76
OFFICE BUILDING ACCOUNT—		
Paid for labor.....	\$32.25	
Paid for lumber.....	81.46	
Paid for mill work.....	33.70	
Paid for roofing.....	20.00	
Paid for hardware.....	16.95	
Paid for screens and awnings.....	10.00	
	<hr/>	194.36
WATER CLOSET ACCOUNT—		
Paid for plumbing and fixtures.....	\$82.23	
Paid for labor.....	19.58	
Paid for lumber.....	13.22	
Paid for iron work.....	1.43	
	<hr/>	116.46
FENCE ACCOUNT—		
Paid for lumber.....	\$57.47	
Paid for labor.....	46.68	
Paid for hardware.....	18.47	
	<hr/>	122.82
FURNITURE AND FIXTURES ACCOUNT—		
Paid for cabinet letter file.....	\$31.00	
Paid for furniture for clerk of the works.....	31.00	
Paid for Fairbanks scales.....	221.50	
	<hr/>	\$285.50
ARCHITECTS FEES ACCOUNT—		
Paid Long & Kees, architects.....		\$22,500.00
ENGINEERING ACCOUNT—		
Paid Frank Plummer, engineer.....		\$553.00
	<hr/>	
Amount carried forward.....		174,527.20

Expenditures (continued).

EXPENSE ACCOUNT—

Amount brought forward		174,527.20
Paid salary of clerk of the works	\$880.00	
Paid salary of the secretary	1,200.00	
Paid salary of attorney	500.04	
Paid salary of office janitor	24.00	
Paid office rent	840.00	
Paid gas bills	104.50	
Paid care of gas lamps	15.50	
Paid for telegrams	4.87	
Paid for postage	4.00	
Paid for expressage	1.70	
Paid for advertising	205.85	
Paid for printing	66.75	
Paid for repairs to fence and water closet	28.70	
Paid for drilling	53.75	
Paid for expert accountant	15.00	
Paid for cut of building	8.00	
Paid for boundary stones	6.00	
Paid for rent of box in safe deposit vault	12.00	
Paid for office stationery	19.10	
Paid for certified copy of act of legislature	2.00	
Paid for painting signs	1.00	
Paid for testing scales .....	.75	
Paid for lumber for scales	16.20	
Paid Harry B. Cramer, rebate on advertising privilege	50.00	4,059.71
Total expenditures		178,586.91
Balance in treasury December 31, 1889		72,164.66
Total accounted for		\$250,751.57

SUMMARY OF THE TRANSACTIONS OF THE BOARD OF COURT HOUSE AND CITY
HALL COMMISSIONERS, FROM ITS ORGANIZATION APRIL 25TH, 1887,
TO DECEMBER 31, 1889.

Receipts.

BONDS.

AMOUNT OF BONDS WHICH THE BOARD IS AUTHORIZED TO ISSUE—		
“City series” bonds	\$750,000.00	
“County series” bonds	750,000.00	
Amount of bonds unsold		\$1,500,000.00
		915,000.00
AMOUNT OF BONDS SOLD—		
“City series” bonds	\$250,000.00	
“County series” bonds	335,000.00	
		\$585,000.00
AMOUNT OF PREMIUMS RECEIVED ON BONDS SOLD—		
“City series” bonds	\$18,917.00	
“County series” bonds	2,000.00	
		\$20,917.00
AMOUNT OF ACCRUED INTEREST COLLECTED ON BONDS—		
“City series” bonds	\$6,632.01	
“County series” bonds	1,500.00	
		\$8,132.01
Total receipts		\$614,049.01

Expenditures.

REAL ESTATE.

Net cost of Block 77, City of Minneapolis, after deducting the proceeds of sale of buildings, etc., thereon	\$321,408.00
---	--------------

BUILDING.

Amount expended in excavating building and material	\$171,885.17
---	--------------

OTHER EXPENDITURES.

Amount expended in architects' fees, including full sets of plans and drawings complete	\$30,000.00
Amount expended in salaries of secretary, attorney, clerk of the works and janitor	5,263.80
Amount expended in engineer's fees for surveying etc	987.00
Amount expended in cost of competition, premiums to competing architects and exhibit of plans	3,302.11
Amount expended for expenses, including office rent, advertising, printing, stationery, postage, etc	5,306.81
Amount expended in erecting fence around building	556.78
Amount expended for furniture and fixtures	1,112.71
Amount expended for office and water-closet buildings	310.82
Amount expended for interest	1,751.15
Total expenditures	\$541,884.35
Total receipts from all sources	\$614,049.01
Total expenditures	541,884.35
Balance in treasury of the board	\$72,164.66

ANNUAL REPORT

OF THE

CITY ASSESSOR,

Of the City of Minneapolis.

J. C. PLUMMER, - - - City Assessor.

ANNUAL REPORT

OF THE

CITY ASSESSOR,

MINNEAPOLIS, MINN.

MINNEAPOLIS, January 10, 1890.

To the Honorable City Council of Minneapolis:

GENTLEMEN—I have the honor to submit herewith my annual report of the work of this department for the year ending December 31, 1889.

Being the odd numbered year, only the personal property and new buildings were subject to assessment.

By reference to schedules A and B of this report, you will find the personal assessment amounting to \$23,348,930, and the new buildings \$2,668,650.

For each item of the personal assessments reference is made to schedule B by further reference to schedule A by taking the real estate assessment of 1888 with the buildings, together with the personal assessment and new buildings of 1889, you will find the total assessment of the real and personal property of the city to be \$130,864,055, an apparent gain of \$3,539,891.

DISBURSEMENTS.

The disbursements of this department for the year ending December 31, 1889, have been:

For salaries.....	\$8,235.53
Printing and stationery.....	371.39
Correcting atlas and plats.....	183.00
Maps.....	14.10
Bill of probate clerk for index of estates.....	30.00
Leather case for books and maps.....	10.00
Horse hire.....	125.50
Incidentals.....	5.00

Total..... \$8,974.52

Of this amount \$1,000 were expended on the working plats of the city, leaving as the actual cost of the last assessment, \$7,974.52.

ABATEMENTS.

From the assessment of 1888 there has been 162 abatements, amounting to \$489,631; the tax on which would have been \$9,527.03. These abatements are largely the result of errors, probably 75 per cent. of them can be justly charged to the inadequacy of map equipment of this department. With the completion of the working plats now in progress, the number of abatements on account of errors of location will be largely diminished.

PERSONAL TAX LAWS.

I desire to call the attention of your honorable body to our personal assessment laws. In my opinion they are not the best that human ingenuity has devised. Perhaps we can learn some things from some of the older states in this direction that would be to our advantage to have adopted in Minnesota: particularly our system of assessment on goods and merchandise of merchants and manufacturers. If, instead of assessing the amount of goods and merchandise on hand at a given time, there should be a suitable tax imposed on the gross sales for the year, said tax to be equivalent in money raising power to the rate levied on other property. I believe we would get a

more equitable distribution of the tax than is now obtained under the present system. Honest men would pay no more than they do now. Tax evaders would be obliged to come to the front and pay their just proportion. Manufacturers would be relieved from the injustice of paying a tax on the same articles, oftentimes as now happens, two or three years before the articles even arrive in the city. Such a system could work injustice to none.

The item of household goods and furniture is perhaps the one of all others in which there is the most inequality, and it is the item that affects the greatest number of individuals. Many people return to the assessor, under this item, all they ought, quite a large class, from motives of pride, return much more than they have, others are assessed by the deputy assessor for more than they should be, and I regret to have to say, quite a numerous class, return from 20 to 50 per cent. of what should be returned. This class is best able of any to bear the necessary burden of taxation. For a remedy I would suggest if the exemption was increased to \$300, or perhaps \$500, much of this inequality would be eliminated from the assessment roll, and if, in place of the exemption, we could impose a poll tax of not less than \$1.50 or more than \$2.00, and make the treasurer's receipt therefor the voter's qualification. The state, county and city would be none the loser.

ADDITIONS TO THE CITY LIMITS.

The colored lines on the map accompanying schedule A show the different additions to the territory of the city since 1873.

BUILDINGS.

In schedules C, D and E, you will find a comparative statement of the assessments of the city from the year 1880 until the present time.

Referring to the assessment of 1889 and 1838, there were on May 1, 1889, 25,465 buildings of the classes named in the table in schedule C, exclusive of elevators, mills and manufactories, schools, churches and public buildings. There are now 21 elevators, of 13,990,000 bushels capacity, assessed for \$885,000. One hundred and sixty-four mills and manufactories assessed for \$3,922,200.

LAND ASSESSMENTS, PLATTED AND UNPLATTED.

The entire land assessment of 1888, was \$80,598,637, this was made up of 87,577 tracts or descriptions of which 780 are for unplatted land, this was assessed for \$10,720,080, or about 12½ per cent of the whole. Many of these unplatted tracts are very valuable and are immediately available for the customary uses of a large city. Many of them the owners have so far declined to plat or dispose of to parties who would improve them. There is no reason why these lands should not be assessed on the same basis as adjacent lands, the improvement of which have contributed so much to enhance the value of all surrounding property.

No inconsiderable part of these unplatted lands are prospectively valuable; already they have a value beyond their value for agricultural purposes, the only use they can be put to now or in the near future. Their value at present is largely speculative and should not be made the basis for assessment. They are now assessed too high and should be reasonably reduced.

Of the platted lands there are localities that in the last few years have rapidly increased in value. By reason of favorable locality or many expensive permanent improvements and other causes, their values have become in a measure standard. They can be sold to ready purchasers on short notice for a reasonable price. Of some of these the assessment has not kept pace with their rapid enhancement in value. A reasonable advance on these will probably offset the decrease that should be made on the agricultural lands.

NEW ADDITIONS.

In this connection, I would suggest to your honorable body, that in view of the advantages to be derived from the city by owners of new additions, sub-divisions, etc., that an ordinance or resolution be made that hereafter no plat for any new addition or sub-division of land shall be accepted by the city until the owners thereof shall have conspicuously marked their blocks and lots with suitable, permanent stakes, and shall have graded the streets therein to conform to the grade established by the city. Let them make

their property recognizable from the adjacent prairie and accessible, before asking the city to recognize it and improve it, and before inviting people to make homes on it.

PERCENTAGE OF GAIN.

The percentage of gain from 1880 to 1882 was.....	18 $\frac{1}{4}$
The percentage of gain from 1882 to 1884 was.....	16 $\frac{3}{5}$
The percentage of gain from 1884 to 1886 was.....	11 $\frac{1}{2}$
The percentage of gain from 1886 to 1888 was.....	12 $\frac{3}{4}$
The percentage of gain from 1880 to 1889 was.....	37 $\frac{1}{2}$

STATE BOARD OF EQUALIZATION.

Among the last acts of the late state board of equalization, were those raising the valuation on the household goods and furniture of Minneapolis, twenty-five per cent.; the diamonds and jewelry twenty-five per cent. and the bank stock three per cent.

In the absence of our representative on the board, strenuous efforts were made to raise the goods and merchandise on a plausible quibble, which failed. The item of household goods and furniture was one of the few items on which in this year of depression we had made a gain over the preceeding year; and was the item of all others, that should have been let alone. With due deference to the wisdom of that august body, I characterize their action as unfair and unjust; unfair in that we were not represented before them; unjust because where it may deal justly with one individual under that head, it is an act of oppression on one hundred who have been assessed already for as much as they had. Our bank stock was assessed at the same rate as that of St. Paul. It is a well known fact among business men, and the board could have readily ascertained the fact that St. Paul's bank stock is worth as much as ours, yet it was equalization to raise it three per cent. above that of St. Paul. To justify their act it was necessary to go behind the regular returns to the assessor, to the returns made to the comptroller at some previous time, which was clearly illegal.

Minneapolis pays two-ninths of the entire tax of the state; it has a representation on the board of one-sixteenth.

While such a disparity exists in the make up of the board, and with jealous rivalry to meet, will we not be liable to have a similiar experience, will they not again strain at the gnat of our goods and merchandise, give it up, and swallow the camel of our husehold goods and furniture?

COMPARED WITH OTHER CITIES.

By the courtesy of the officials of the assessors' deparatment of the cities named in schedule "F," I am able to exhibit a comparative table of the assessments for 1889 on leading grades of real estate corresponding with similiar grades here. Referring to this table you will find that our best retail property, namely on Nicollet avenue from Washington avenue to Sixth street, is assessed from \$500 to \$550 per front foot; the highest assessment being the corners of Washington and Nicollet avenues, about \$750 per foot; the best wholesale lots, \$200 to \$350 per foot. Medium retail business lots on north and south Washington, Plymouth, Cedar, Franklin avenues and other business centers, \$50 to \$125 per foot. The best resident property, Seventh street between Second and Sixth avenues south, \$125 to \$225 per foot. This has a prospective business value and is not strictly resident property. Resident property on Tenth street from Second to Eighth avenues south and on Clifton avenue from \$100 to \$125 per foot; \$35 to \$40 per foot are assessed on First, Second, Stevens, Third, Clinton, Fourth, Fifth, Portland and Park avenues between Grant and Twenty-fourth streets, and on University avenue, Fourth, Fifth and Sixth streets southeast; this grade of assessment comprises some of our very best resident territory. Workingmens' lots on and near street car lines and motor within three miles of mills and business, from \$5 to \$15 per foot.

Many of our citizens entertain an opinion that Minneapolis assessments are high and taxes more than they should be. In a new and rapidly growing city, many permanent and expensive municipal improvements must necessarily be made that older cities do not now have to provide for. A careful examination of schedule "F" shows most favorable for the conservatism of Minneapolis valuations, and as the figures are all official from the last assessment roll of the cities named therein, should be convincing.

COMPARATIVE COST OF THE ASSESSOR'S DEPARTMENT WITH OTHER
SIMILAR CITIES.

It is with much satisfaction that I refer to the table of comparative cost in schedule "F," the figures speak for themselves.

I would respectfully ask those of our fellow citizens who are disposed to cavil at what they term municipal extravagance, to carefully examine this table.

IN CONCLUSION.

The query naturally arises, are we likely to maintain this marvellous growth? What are the reasonable probabilities?

To answer this question it becomes necessary to inquire into the immediate causes for our unprecedented prosperity as a city, during the last decade.

About the year 1880, we were favored with a combination of circumstances such as it has been the good fortune of few cities to meet. For several years prior to 1880, we were making comparatively slow growth, while the great northwestern empire tributary to us was making tremendous strides in development, until in 1880 the country had far outgrown the cities. About the same time manufacturing and general business in the east became depressed after a long period of prosperity with the usual results, that many individuals withdrew their capital from uncertain and precarious enterprises, and sought homes and investments in western cities; from this source, we drew our full share. At the same time several of our leading railroads acquired extensive terminal facilities in Minneapolis; most of the lands for which, was in the hands of small holders. In 1883, the Northern Pacific was completed to the Pacific coast. Either of these causes alone would have produced marked activity. From this remarkable combination of fortuitous circumstances, we have achieved the splendid results of to-day.

It is hardly probable that the next decade will witness for us another similar combination: nither are we likely nor is it desirable to acquire much more territory. Yet by the fostering of and promotion of manufactories, with which I feel as a city, we should deal liberally, in the way of assessments, with the increase of street car facilities, with the momentum we have acquired and with the continued development of the mighty empire of which Minneapolis is the entrepot, we can confidently expect a reasonable gain. I hazard the prediction of an average gain of ten per cent. per annum on our present valuation for the next ten years.

In conclusion, I heartily tender my thanks to the council collectively and individually, and the heads of the departments for the uniform kindness with which I have been treated. I also cheerfully acknowledge my obligations to my deputies and assistants for their faithful co-operation in the somewhat arduous duties of this department.

Very respectfully,
J. C. PLUMMER,
City Assessor.

=

—
45
30
30
70
20
45
20
40
10
25
45
40
60
—
80

—

27

=

—
157
753
507
966
776
350
387
325
322
226
453
392
241
—
055
—

Personal Assessment of 1889.

Schedule "A."
Assessment of 1889.

WARD.	No. of personal assessments.	Personal.	No. of new buildings.	Assessed value of new buildings.	Total.
First.....	537	\$717,395	82	\$63,750	\$781,145
Second.....	957	2,015,530	115	100,700	2,116,230
Third.....	1,255	1,647,070	232	269,860	1,916,930
Fourth.....	2,549	9,998,760	151	580,210	10,578,970
Fifth.....	2,178	5,619,305	106	696,215	6,315,520
Sixth.....	464	552,330	54	63,415	615,745
Seventh.....	782	381,010	250	212,110	593,120
Eighth.....	1,088	1,187,440	208	237,700	1,425,140
Ninth.....	384	314,270	186	136,540	450,810
Tenth.....	222	264,775	124	75,750	340,525
Eleventh.....	613	350,845	120	168,400	519,245
Twelfth.....	126	155,390	40	26,450	181,840
Thirteenth.....	171	144,810	70	37,550	182,360
Total.....	11,326	\$23,348,930	1,738	\$2,668,650	\$26,617,580

Assessment of Real Estate for 1888 and Personal Property and New Buildings for 1889 is as follows.

WARD.	Realty.	Buildings.	Personal of 1889 and new b'ld'g.	Total.
First.....	\$2,235,552	\$926,460	\$781,145	\$2,943,157
Second.....	5,178,708	1,714,815	2,116,230	9,009,753
Third.....	7,419,348	2,711,220	1,916,930	12,047,507
Fourth.....	20,780,038	7,129,058	10,578,970	38,488,066
Fifth.....	14,002,906	5,371,650	6,315,520	25,690,076
Sixth.....	2,459,025	1,279,080	615,745	4,353,850
Seventh.....	3,563,642	1,199,925	593,120	5,356,687
Eighth.....	8,525,265	2,163,420	1,425,140	12,113,825
Ninth.....	3,258,258	785,754	450,810	4,494,822
Tenth.....	3,019,957	389,744	340,525	3,750,226
Eleventh.....	2,343,045	1,333,163	519,245	4,198,453
Twelfth.....	2,933,757	123,795	181,840	3,239,392
Thirteenth.....	4,759,136	236,745	182,360	5,178,241
Total.....	\$80,598,637	\$25,368,648	\$26,617,580	\$130,864,055

CITY OF MINNEAPOLIS.

Schedule "C."

Assessment of 1888.

WARD.	No. of tracts of realty.	Total assessments of realty.	No. of unplatted realty tracts.	Assessment of unplatted realty.	No. of buildings.	Assessment of buildings.	Amount of personal assessment.	Total valuation of real, personal and building.
First	3,500	\$2,235,552	47	\$263,050	1,292	\$926,460	\$494,580	\$1,656,502
Second	6,638	5,178,708	36	886,150	1,915	1,714,815	1,053,290	7,946,813
Third	7,832	7,419,348	33	813,700	3,353	2,711,229	1,561,609	11,692,186
Fourth	7,104	20,780,038	52	1,114,540	2,905	7,129,058	10,113,176	38,022,264
Fifth	3,057	14,002,906	10	415,500	2,436	5,371,650	4,934,491	24,309,047
Sixth	1,852	2,459,025	5	33,600	1,735	1,279,080	485,935	4,223,880
Seventh	7,610	3,563,642	49	622,425	2,693	1,199,925	307,543	5,161,110
Eighth	9,120	8,525,265	89	866,475	1,886	2,163,420	808,464	11,497,149
Ninth	8,255	3,258,258	66	1,143,445	2,180	785,754	576,962	4,620,974
Tenth	7,248	3,019,957	103	1,706,130	638	389,744	278,211	3,687,912
Eleventh	2,915	2,343,045	7	107,925	1,995	1,336,163	362,580	4,041,788
Twelfth	6,625	2,633,757	188	1,614,240	294	123,795	145,494	3,203,046
Thirteenth	15,281	4,759,136	89	1,132,600	577	236,745	204,544	5,200,425
Total	87,577	\$80,598,637	780	\$10,720,080	23,897	\$25,368,648	\$21,356,879	\$127,324,164

Area, 53.5 square miles.

Number of Assessments on Buildings in Each Ward of the Values as Noted at the Top of Each Column—Assessment of 1888.

[illegible]

Schedule D.
Assessment of 1887.

WARD.	Realty.	Personal.	New buildings.	Total.
First.....	\$2,904,290	\$1,028,688	\$76,550	\$4,009,528
Second.....	6,164,208	1,491,890	133,900	7,789,998
Third.....	7,801,661	1,583,145	226,600	9,611,406
Fourth.....	24,184,229	9,240,110	581,450	34,005,789
Fifth.....	18,058,422	4,933,565	248,330	23,240,317
Sixth.....	3,521,600	444,650	111,300	4,077,550
Seventh.....	3,819,008	310,855	228,700	4,358,563
Eighth.....	7,507,034	776,585	631,200	8,914,819
Ninth.....	2,951,147	296,020	163,350	3,350,517
Tenth.....	1,779,293	252,190	65,850	2,097,333
Eleventh.....	3,196,694	238,740	128,750	3,564,184
Twelfth.....	1,753,800	174,800	10,700	1,939,300
Thirteenth.....	2,695,508	127,480	49,750	2,872,738
Total.....	\$86,426,894	\$20,898,718	\$2,506,438	\$109,922,042

Assessment of 1886.

WARD.	Realty.	Personal.	New buildings.	Total.
First.....	\$5,085,765	\$856,001	.....	\$5,141,766
Second.....	5,957,705	1,238,074	.....	7,195,779
Third.....	8,474,055	1,234,518	.....	9,708,573
Fourth.....	24,064,808	8,972,618	.....	33,037,426
Fifth.....	17,967,915	4,665,254	.....	22,633,169
Sixth.....	6,631,170	631,418	.....	7,262,588
Seventh.....	4,223,865	179,959	.....	4,403,824
Eighth.....	8,045,065	473,644	.....	8,518,709
Total.....	\$80,450,348	\$18,251,486	.....	\$98,701,834

Assessment of 1885.

WARD.	Realty.	Personal.	New buildings.	Total.
First.....	\$707,286	\$155,855	\$863,139
Second.....	1,011,064	128,480	1,139,544
Third.....	790,809	450,310	1,241,119
Fourth.....	8,274,480	862,090	9,136,570
Fifth.....	4,069,209	375,800	4,445,009
Sixth.....	680,759	144,605	825,164
Seventh.....	158,155	109,840	267,995
Eighth.....	300,194	280,460	580,654
Total.....	\$15,989,956	\$2,506,640	\$18,496,596

Area 33 2 square miles.

Assessment of 1884.

WARD,	Realty.	Personal.	New buildings.	Total.
First.....	\$4,255,595		\$861,388	\$5,117,983
Second.....	4,702,840		1,087,900	5,790,830
Third.....	6,938,204		800,732	7,738,936
Fourth.....	21,891,581		7,652,281	29,543,862
Fifth.....	15,848,681		3,861,874	19,710,555
Sixth.....	5,861,305		598,103	6,459,408
Seventh.....	3,899,375		203,553	4,102,928
Eighth.....	7,413,511		280,163	7,693,674
Total.....	\$70,810,992		\$15,346,034	\$86,158,176

Total number of descriptions of real estate, 52,087. Total number of buildings, 15,187.

New territory added: First ward, $2\frac{1}{2}$ square miles; second ward, $1\frac{1}{2}$ square miles; third ward, 3 square miles; fourth ward, 3 square miles; seventh ward, $4\frac{1}{4}$ square miles; eighth ward 9 square miles. Total $23\frac{3}{4}$ square miles.

*Schedule "E."**Assessment of 1883.*

WARD.	Realty.	Personal.	New buildings.	Total.
First.....		\$893,493	\$130,675	\$964,168
Second.....		1,226,847	164,400	1,391,247
Third.....		794,876	311,750	1,016,626
Fourth.....		7,233,546	788,850	8,022,396
Fifth.....		4,116,996	882,470	4,999,446
Sixth.....		561,722	331,550	893,272
Seventh.....		168,482	207,750	376,232
Eighth.....		189,004	256,150	445,154
Total.....		\$15,034,966	\$3,073,595	\$18,108,561

Assessment of 1882.

WARD.	Realty.	Personal.	New buildings.	Total.
First.....	\$2,742,965	\$497,004		\$3,239,969
Second.....	3,078,775	780,823		3,859,598
Third.....	3,382,603	409,760		3,792,363
Fourth.....	15,808,108	5,106,672		20,914,780
Fifth.....	13,105,580	2,534,151		15,639,731
Sixth.....	4,618,950	456,321		5,075,271
Total.....	\$42,736,981	\$9,784,731		\$52,521,712

Assessment of 1881.

WARD.	Realty.	Personal.	New buildings.	Total.
First.....		\$430,712	\$101,465	\$532,177
Second.....		627,975	172,850	800,825
Third.....		278,939	91,100	370,039
Fourth.....		4,656,282	298,600	4,954,882
Fifth.....		1,998,154	337,700	2,335,854
Sixth.....		324,517	168,825	493,342
Total.....		\$8,316,579	\$1,170,540	\$9,487,119

Assessment of 1880.

WARD.	Realty.	Personal.	New buildings.	Total.
First.....	\$1,360,313	\$358,645		\$1,718,958
Second.....	1,843,021	449,107		2,292,128
Third.....	1,875,301	227,672		2,102,973
Fourth.....	6,566,345	3,702,604		10,268,949
Fifth.....	7,411,247	1,916,572		9,327,819
Sixth.....	1,861,040	432,472		2,293,512
Total.....	\$20,917,267	\$7,087,072		\$28,004,339

Area 10.4 square miles.

Assessed valuation from 1880 to 1889 inclusive.

1880.....	\$28,004,339	1885.....	\$80,207,587
1881.....	30,404,379	1886.....	98,701,834
1882.....	52,521,710	1887.....	109,992,042
1883.....	60,865,542	1888.....	127,325,164
1884.....	86,158,176	1889.....	130,864,055

23¼ square miles of new territory added.

Schedule "F."

Assessment of 1889 compared with Other Cities for the Same Year, also a Comparison of Assessments on Business and Residence Lots of Similar Grades to Ours. These Assessments are per Front Foot.

CITIES.	Area in square miles.	Population.	Real Estate.	Personal.	Total.	Assess'm'ts on best wholesale lots.	Assess'm'ts on best retail lots.	Best residence lots.	Medium residence lots.	Cheap residence lots.	Rate of taxation.
Omaha.....	24½	112,000	\$17,000,000	\$4,000,000	\$21,000,000	\$500 to \$900	\$150 to \$250	\$150	\$60	\$15	*7 per cent.
Kansas City..	11	180,000	44,961,120	16,888,050	61,869,170	150 to 250	600 to 700	100	30	3	+11 mills.
Detroit.....	22	270,000	117,453,140	39,052,050	156,505,190	1,500 to 1,600	1,600 to 1,800	400	250 to \$300	20 to \$30	+14 "
Milwaukee...	18	212,000	80,678,660	19,819,540	100,498,200	600 to 700	750 to 1,000	150	70	15	22½ mills.
St. Louis.....	63	450,000	195,978,250	31,191,730	224,169,980	1,200 to 1,500	1,400 to 2,500	150	70	20 to 70	22 mills.
Louisville....	12	200,000	58,970,378	9,381,554	68,351,932	700 to 900	700 to 1,200	110	50	3 to 15	19 4-5 mills
Pittsburg....	27 65-100	200,000	198,782,443	1,518,252	200,300,695	400 to 600	700 to 1,000	200 to 250	150 to 200	10 to 15	18 "
St. Paul	55	200,000	102,043,955	19,373,093	121,417,048	200 to 350	300 to 450	200 to 225	100 to 125	5 to 10	\$21 4-5 mills
Minneapolis..	53½	240,000	106,716,347	23,348,930	130,065,147	200 to 350	300 to 450	200 to 225	100 to 125	5 to 10	

*Of which 48 mill is for city purposes.

+For city purposes.

+City tax.

\$ State, county and city tax.

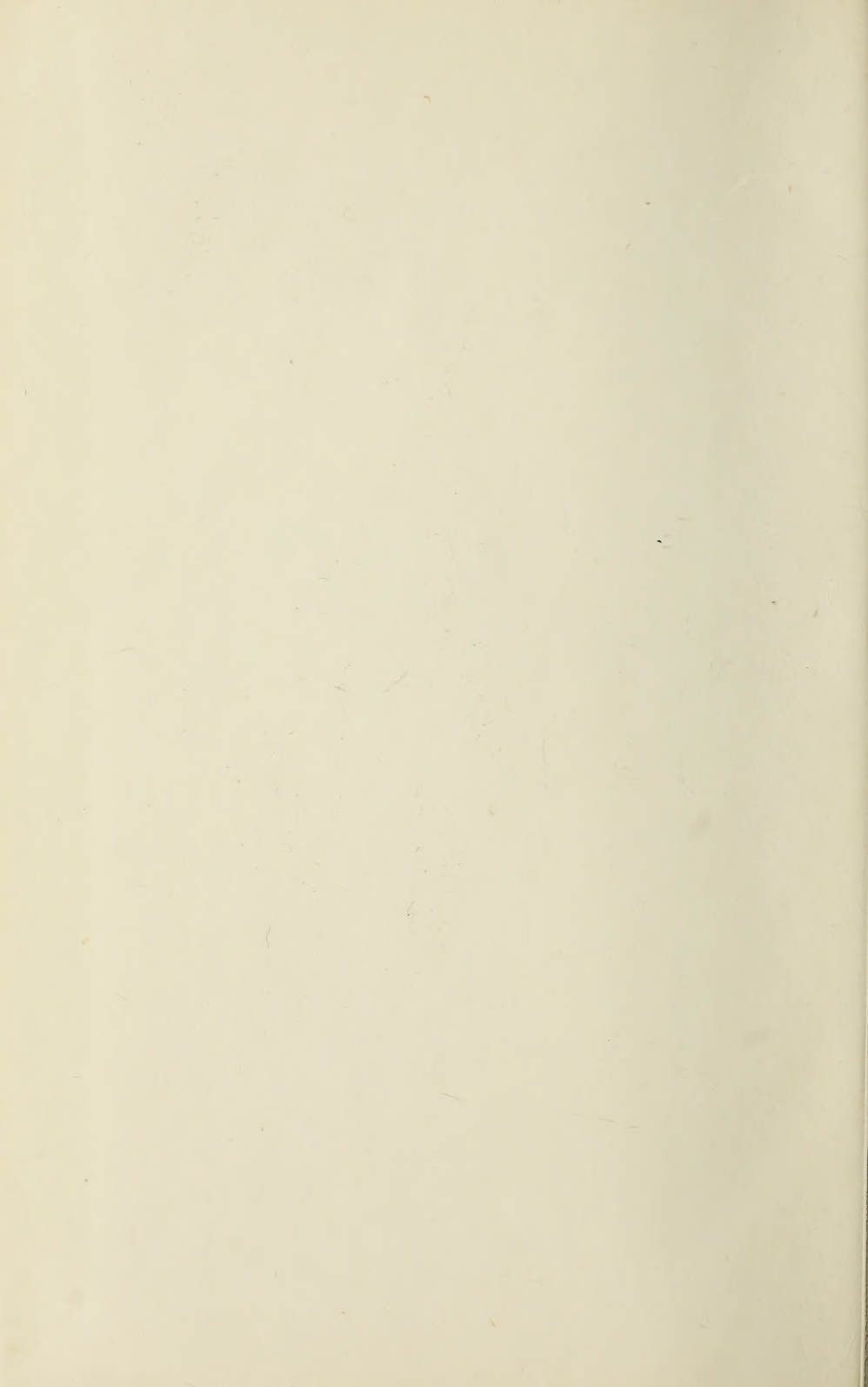
It is proper to state that the assessment of \$900 and \$225 per foot for best residence lots in Minneapolis are for lots on Seventh street that have a prospective business value beyond their value for residence purposes, and they are not strictly residence lots; \$100 and \$125 per front foot are for lots on Tenth street, Clifton avenue and property on Central Park. The \$85 and \$40 assessments are for lots on Park, Portland, Fourth, Third, Clinton, Stevens avenues, etc., and University avenue, Fourth, Fifth and Sixth streets southward, the cheapest residence sections of the city.

A Comparison of the Cost of the Assessment of 1889 in the Above Cities.

Omaha.....	\$5,000.00	Louisville.....	\$10,310.00
Kansas City.....	12,000.00	Pittsburg.....	14,000.00
Detroit.....	35,000.00	St. Paul.....	9,500.00
Milwaukee.....	17,300.00	Minneapolis.....	7,974.53
St. Louis.....	64,555.00	Buffalo (valuation of Buffalo, \$157,503,780)	36,800.00

No longer than this St. Louis





UNIVERSITY OF ILLINOIS-URBANA



3 0112 110818116